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MUNIMENTA ANTIQUA.

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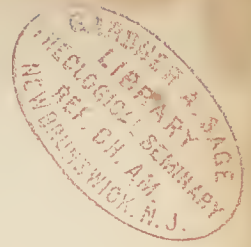
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Frontispiece.



S. P. View of the Montserratian Beacon

Published and Sold by J. G. & Co. 10, Pall Mall, London.



MUNIMENTA ANTIQUA;

OR,

OBSERVATIONS ON ANTIENNT CASTLES.

INCLUDING

REMARKS ON THE

WHOLE PROGRESS OF ARCHITECTURE,

ECCLESIASTICAL, AS WELL AS MILITARY,

IN GREAT BRITAIN:

AND ON

THE CORRESPONDING CHANGES, IN

MANNERS, LAWS, AND CUSTOMS.

TENDING BOTH TO ILLUSTRATE

MODERN HISTORY:

AND TO ELUCIDATE MANY INTERESTING PASSAGES IN VARIOUS

ANTIENNT CLASSIC AUTHORS.

BY

EDWARD KING, ESQ. F.R.S. AND A.S.

Modo me Thebis, modo ponit Athenis. Hor. Ep.

VOL. I.

LONDON:

PRINTED BY W. BULMER AND CO.

FOR G. NICOL, BOOKSELLER TO HIS MAJESTY, PALL-MALL.

FEBRUARY,

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P R E F A C E.

WHEN these sheets, and those which are intended to follow this Volume, were first penned,—it was in days of peace, and of great and long prosperity; such as this country, and the rest of the kingdoms upon earth had not before known;—in days, when scenes and acts of savage barbarity were heard of only as antient tales; and scarce credited;—and when the mention that is made of them in these pages, as an illustration of the history of antient times, was necessarily to be introduced with much caution, and the citation of good authority, to prevent their being considered as mere fables; and as depreciating the narration, rather than affording useful light.

But we have lived, in these late ages of the world, to have such dreadful scenes of more than savage barbarity revived,—that, before the book can be published, the just apprehension is now become, lest such narrations should be even deemed useless; as mere needless efforts to convince mankind of that horrid depravity of human nature, with which they are only too well acquainted.

There is, however, still one material difference, between the savage cruelties, and ravages of antient, and of modern times; which may render the accounts here given interesting:—and which, though it tends to the greater condemnation of the present age, yet affords some consolation.

The antient scenes of shocking outrage,—were in days of dark ignorance ;—and before it had pleased God to bestow upon the world the comforts arising from the improvements of ingenious arts and labours, and of what are *called inventions* of true genius :—but the horrid scenes of modern outrage, and barbarity,—are in the midst of such rapid and refined improvements of elegant arts, and of all the most effectual means of cultivating the face of the whole globe of earth, as surely cannot but be considered, even in the midst of the dire scene, (and whilst adversaries to truth, and true religion are, without knowing it, bringing to pass the decrees of Heaven) as harbingers of better tidings ;—and as preparations for a future sudden burst of peace and glory : when, at the time appointed by *The Almighty*, and in the way *His Divine Wisdom has decreed*, all things shall soon be brought to perfection.

The original intention of writing these sheets was, to apply the *study of Antiquities* to the elucidation of the history of the ways of Divine Providence, in gradual successive dispensations ; and of His dealings with the sons of men, in leading them from strength to strength, till His wondrous work and purpose, in the very first creation of the human soul, shall be finally accomplished.—And this strange change of human manners, which has *now*, so suddenly, and so dreadfully taken place, checking, apparently, for a short time, the progress of improvement, does only render the important history even still more interesting.

The tale therefore of antient deeds, and of antient modes of living, begun in these pages, may still be allowed to go on, without interruption ;—though modern barbarity of manners, becomes such a sad refinement of the antient, and more execrable barbarism ; as to render the tale somewhat less surprising and striking.

The beginning of our narration, and which is contained in this Volume,—relates solely to *the earliest periods* in Britain ; before the invasion of the Romans.—The days of primæval sim-

plicity, and rudeness ;—the days of Druidism,—and of Patriarchal manners.

And here ; with regard to such of the Druidical structures as were indeed unquestionably Temples ; I have carefully avoided, as much as possible, the repeating, or interfering with what has been written, so much at large, by *Doctor Stukeley* :—leaving the curious still to draw their own conclusions from his learned dissertations ;—though it cannot but be observed, that in the course of this work, conclusions, even on different grounds, have led me very much to agree with him. My object, it will be found, has been to add, if possible, by fair observations, new and additional light to the interesting subject ; by an investigation of circumstances, which had before escaped due notice.

And in other points, with regard to *Rowland, Borlase*, and other able writers, to whom we are so much indebted, it will be found that I have, as much as possible, observed the same rule.

The second Volume, which has the Plates already engraved, and is printing with all expedition, will relate to the works of the Romans in this Island, and the improvements introduced by them ;—to such works of the Britons as were *imitations* of Phœnician, and Syrian architecture, with which they were made acquainted by the traffickers for tin ;—and to such as were mere *imitations* of Roman architecture ;—and also to such as, in the more barbarous parts of the Island, were only *imitations of those imitations*.

The third Volume, which is also ready for the press ; will contain the history of what truly relates to the *Saxon* times.

And the fourth, the History of the strenuous efforts of *Norman* genius :—and of the preparations which their sturdy, and violent endeavours were permitted to make for better times.

As viewing the history of our country in this light, has opened a scene of wonder and delight ; and carrying with it a full conviction of truth, though mixed with much novelty of ideas, to the mind

of the Author ; it may perhaps become no less striking, and interesting to the minds of others.

The world becomes, by this means, in the truest sense, the great and splendid *theatre*, on which are displayed the wonders of Divine wisdom, and designation, bringing light out of darkness, and a spiritual world of created beings to maturity.

But there are scenes ; amidst which we must proceed with cautious steps.

In this first part, therefore, it may be observed, that there are circumstances of particular superstitious observances, that are said to have prevailed amongst the Druids, which yet are not detailed at length in these pages.

And the reason is,—because they do not relate to the peculiar object of these observations ;—because also of the uncertainty with regard to some of them, (many of the conclusions resting on surmise ;)—and because they have been more than sufficiently mentioned by others ;—whilst, at the same time, it is surely to be wished, that a veil should for ever be drawn over the foul and foolish abominations of horrible idolatry ; wherever sacred truth does not demand the naming of them.

Such circumstances are ;—

The account of the stately old Tree, in the deep wood, with its branches lopped off ; and having the two largest fixed expanding horizontally at top, so as to cause the whole to resemble the form of a T.

The use of the ideal device of the orbicular winged serpent ;—so much correspondng with the idea of the wings, the orb, and the serpent, found amongst the Egyptian hieroglyphics.

The use also of the ideal device of the *Mundane Egg*.

And the pretence concerning the *Anguinan*, or *Serpent Stone*, sometimes called the *Adder Stone*.

The various kinds of Lustrations :

The attention to the *white* horse, and to the *white* bull.

The veneration for the *vervain*, and other consecrated grasses ;— which was perhaps only a dark initiation to some science of botany, and medicine.

The reverence for the *Crescent Moon*.

The hallowed, and unhallowed solemn Turnings from east to west, or from west to east.

The supposed Dances of three groups ; the one wheeling round in a circle, from the right hand to the left ; and the other from the left hand to the right ; with the slow walk of the third round a central altar, at the same time.

The supposed Fire Dances.

The Fires, or Bealtine, lighted on the Cairns, on May-eve :—and the Double Fires on May-day ; between which they caused their men and beasts to pass, which were destined to be sacrificed.

And finally, the horrid magical rites of devoting their enemies ; in deep groves, whose trees were sprinkled, and reeking, with blood and gore.

Barely to name such detestable offences of dark ages, (from any enlarged narration of which, if such had been possible, no good could be derived ;) is more than sufficient.

And the more interesting and safe pursuit, is to investigate, by means of scattered Remains of antient labour and architecture, and by means of scattered Records, *how*, amidst the deepest errors, useful exertions have yet been made ;—and how the mind of man has been insensibly guided through the whole wondrous chain of events, from gloomy darkness, unto hope, and light.—How obstinate prejudices have been overcome ;—the bonds of habit broken ;—and the fetters that held the human mind in such sad durance, by degrees loosened.

This will be still more the purport of what is proposed to be printed in the succeeding Volumes, than even of what is contained

in this. But as, in this present Volume, there has been occasion both to refer to, and to fling some light upon, the historical part of the *Holy Scriptures*; and also upon several passages in the most *antient classic authors*; two short Indexes are added; besides a very full and minute Table of Contents.

The one Index, points out the Passages in the *Holy Scriptures*, that are at all illustrated in these pages;—in regular order, according to the arrangement of the Sacred Books.

And the other Index, leads to such passages in *antient writers*, as are here placed in any striking point of view;—or have had any additional light cast upon them.—And also some particular circumstances, besides those mentioned in the Table of Contents, that are most deserving of notice.—And is made as short, and comprehensive, as possible.

The same plan will be pursued in the succeeding Volumes; if the Author's life is spared to print them.—And as to the rest of their contents; it would be improper *here* to repeat what has been said in the *Advertisement prefixed to the VESTIGES OF OXFORD CASTLE*. And especially as no part of that *little Tract* will now be inserted in the body of this publication; but the whole will be left to be bound as an *Appendix* to the work at large: that no one may be obliged to purchase the contents of that Dissertation, in any shape, a second time, for the completion of this publication.

How far the endeavour of rendering the search after Antiquities more interestingly useful, has been accomplished in these Volumes, every reader must judge for himself:—and faithful endeavours must speak for themselves; after a candid examination of the conclusions they produce.

Real science can never be advanced (as has been sometimes vainly attempted in antiquarian researches) by shallow conceits; or by hasty and precipitate conclusions, from a slight view of things; or by obstinate adherence to early imbibed prejudices. Patient

examination; repeated comparison of antient Remains, to discover the agreement or disagreement even of minute parts; and much candour, to embrace fair and plain deductions, (however contrary to our original apprehensions;) are necessary to investigate truth, in any shape; and more especially in subjects of this nature.

The Antiquary must undergo the laborious drudgery, of taking many accurate measures; and even of adopting different modes of admeasurement, in order to form, as accurately as possible, exact plans,—instead of resting satisfied with mere picturesque views;—must bear the provocation of servants making mistakes and blunders, in stretching the measuring line, and in reading the figures;—must bear the vexation of having figures, written with a pencil, sometimes rubbed out; or others blotted;—must bear the fatigue of travelling through roads almost impassable; and of returning to view ruined objects, over and over again;—must bestow a vast exertion of memory, both natural, and artificial; before he can obtain any right apprehension of those strong and certain outlines of the Remains of past ages, which are absolutely necessary for the clear illustration of the Records of antient times.

He must endeavour, as it were, with an energetic spirit of apprehension, to enter, by a retrospective view, into the very ideas of the original architects; and that also with ideas corresponding to the circumstances of the times in which they lived.

And when he has done all, must bear the mortification of having those who afterwards visit the spots with less cautious apprehensions, and with less diligence of investigation, or after alterations have actually been made, question his accuracy; and contradict his accounts.

The rapid mischievous destruction, that there has been of all antient buildings, of late years, is almost incredible.

I could scarce visit any of them without hearing of some mischief

lately done ; and of towers undermined, or pulled down, within memory.

Not a few curious Castles, and Venerable Buildings, in England, have I passed, in the earlier part of my life, recollecting anecdotes of their history, and delighting to view them ; as if treading upon a sort of *classic* ground ;—(but making, at the time, no drawings, nor taking any measures ;)—and when, from such recollection as I had, I wished to return, and to avail myself of the benefit of more accurate examination ;—their most important parts were either mutilated ;—or else changed, by that worst species of barbarism, called modernization.

Perhaps, it may *now* be needful to render some account of the *first origin* of this work :—and there may be some persons, whose leisure, and curiosity, may lead them to wish to be acquainted with the history of its progress.—

A life begun in habits of intercourse with several persons of refined taste, and elegant pursuits, soon led the Author to an admiration of the Remains of Antiquity. But fair reflection soon led, also, to a conviction, that the study of Antiquities, as far as it tended only to cherish the idle admiration of frivolous works of refined ingenuity, applied at first even to the purposes of gross idolatry, and baneful superstition, is one of the most childish and useless pursuits on the face of the earth :—but, as applied, either by medallic Remains, or otherwise, to elucidate truth, and to investigate the *real* history of past ages ; is one of the most noble, and interesting employments, that can occupy the human mind.

Full of this idea, it soon occurred to my mind ; that surely those magnificent *Castellated Remains* of past ages, which had, in general, been considered only as fine picturesque objects in a landscape ;—or, at most, as only worthy the having some short account rendered of their successive possessors ;—without any sufficient inquiry into their real plan, nature, and design ;—might

deserve a *careful comparison one with another*, as well as the smaller vestiges of antiquity:—and might, by *such comparison*, lead us to a still more solid kind of information.

Born in an age, in which all ideas of the mode of dwelling in the antient *Castellated Mansions* of this country, were so entirely forgotten, in consequence of the happy improvements of succeeding æras of civilization and freedom; that all the design, and the curious devices of their artificial structure, were become almost totally unknown; and indeed unintelligible, on any mere cursory view; (by which means many, even of the most curious circumstances of History, were rendered both uninstructive, and uninteresting;)—I was soon induced, after having viewed a few of those towering structures that were least decayed, with a scrutinizing eye, and eagerly attentive and apprehensive mind, to proceed to compare more of them together, with cautious examination: and having found how much light was to be obtained for the illustration of the most important parts of the History of Mankind, by proceeding in this untrodden path,—I ventured to put together my first conclusions, in a few pages, which I presented, as a Memoir, to the Society of Antiquaries:—and which was printed, in the IVth Volume of the *Archæologia*, in 1777.

The rude sketches accompanying that Memoir, though ill drawn, as being merely by my own hand, were yet sufficiently correct to explain, and to elucidate the whole account.—And the truths recovered from oblivion, by that first effort, excited the most eager curiosity to press forward, following the same researches.—This produced another, and much longer, Memoir, which I also presented to the Society of Antiquaries; and which was printed in the VIth Volume of the *Archæologia*, in 1782.

Here the Drawings, and the Plans, were many of them most minutely accurate: and even such as had not that precision, were yet quite sufficient to convey fairly the general idea of what was

described;—and to explain fully what was most important to be attended to.

Both these Memoirs were joined together, in one quarto Volume, of about 200 pages, for the use of a few friends.

And I had now the satisfaction to find, that *truth* was indeed able to support its own cause:—and that an age, enjoying the blessing and advantage of having been delivered from the depression and blind ignorance that had reigned in the world, whilst *Castles*, and *Cloistered Monasteries*, almost solely afforded *Necessary Protection*, against barbarous violence, and oppression;—had also attained such a spirit of scientific curiosity, as to make the accounts of those splendid *Dungeons*, which had first been so long forgotten as objects of terror, to become at last exceedingly objects of literary inquiry, and pursuit.

But upon this arose a circumstance, deserving still further attention;—and requiring still further elucidation:—a necessity of guarding against the effect produced by the change of appearance made in antient Remains, in consequence of devastations, and alterations, subsequent to my visits to them;—and also of guarding against the mistakes of those, who content themselves with a cursory survey of such objects.

Even within these so few years, since the writing of the Memoirs to which I refer, *Rochester* Castle has been so altered, by fitting it up to be a repository, at one time, for the arms of the County Militia; and then for other purposes;—*Norwich* Castle has been so mutilated;—and its principal front so totally destroyed; and covered with additional buildings;—and *Canterbury* Castle has been so changed, by having all the buildings that were within it, at the time of my survey, pulled down; and so altered with respect to its environs, by having the great road turned close to it;—that these Great Castles no longer carry the same strong, and striking marks of their original curiosity.—And I have found that hasty, and incau-

tious observers, have sometimes fallen into that very error, which I was so carefully guarded against myself, by the old and experienced persons living near the spot, with whom I visited those Remains;—the error of mistaking, for original parts of the Castle;—walls built in later ages;—(and most obviously seen to be such, when scrupulously examined, by their materials:)—of mistaking newel staircases, that had been constructed with old materials, and even partly in the *outside* of the walls of the original structure, merely for the benefit of houses that once adjoined; as parts of the original building;—and the error of mistaking an excavation, left by the destruction of a really original staircase; merely for an empty well;—(though it is of much too large dimensions to have been designed for any such purpose;);—and the error of doubting the existence of appearances, which once were visible enough; but which are so no more.

Some other Structures also, the memorial of which deserve well to be preserved, have been more changed and disguised, within these last twenty years, than for centuries before.

Whilst, therefore, a full conviction of the utility of pursuing the path of inquiry I had fallen into, for the purpose of flinging light on the History of our own Country;—and even upon that of the remotest, and earliest People on the face of the earth;—had caused me to resume my labours; and to endeavour to investigate *the whole progress* of Architectural Improvements, as accompanying the progress of civilization, and change of manners, from the earliest periods; these other concomitant circumstances, and a desire to elucidate the whole subject still more fully; determined me, without hesitation, to lay the whole result of all my labours, in one plain point of view, fairly before the public;—and in such a combined manner, as to carry the utmost weight of evidence possible.—And also with such helps, of Tables of Contents, and Indexes, as might explain the whole more fully; and, as might at

once render the illustration of the various historical parts of the Holy Scriptures; and of various Passages in antient Authors; and the account of the several identical Structures; capable of being easily referred to, by the curious, on any occasion.

The Plans, and the Drawings, were almost all of them made from careful surveys, and exact measurements, taken by myself, with much labour, and pains; and even corrected, in many instances, by repeated visits.—And the Drawings were finished, some by a very able draughtsman, Mr. John Sanders, now of Bath; with constant emendations of every interesting part, under my own eye;—and others were finished, by my Niece, Ann Copson; who was upon the spot, when I visited several of the places; and saw herself almost all that she ventured to execute;—and who also had all her draughts examined, and carefully compared with my measures, and the most exact observations I could make.

Her Drawings are all marked A. C. on the Plates;—though she is now married to the Hon. Henry Windsor;—and I should do her injustice did I not say, that they may be classed amongst the most accurate of any in these Volumes.

Wherever any other Drawings, which I have been favoured with from any ingenious and curious persons, are added; I have mentioned *the names of those Friends*, with all due acknowledgment, in the accompanying descriptions.

And now it ought to be premised;—that even yet;—and after all the care, that has been used in preparing the materials to illustrate the observations in these pages;—there may, unavoidably, be still some imperfections, and errors, both in some of my Plans, and in some of these Drawings;—which errors, those who follow me in visiting the objects described, may possibly, by the assistance, and inducement here afforded for the consideration of them, still more accurately discover; though they have escaped my notice.—But it ought to be remembered by all, who may ever be able to add

any more correct designs ;—that they would probably neither have comprehended the Plans of those Buildings at all ; nor have thought of attending to any such minute circumstances relating to them, unless they had first received from these persevering labours, an intelligible leading outline, to assist them in pursuing their further inquiries.

I found *those Buildings* so buried in ruins, when I began my researches :—and had so many tedious neglected paths to tread ;—and so many prejudices to encounter ;—that it was needful, to abide, for a time, by the advantage, solely, of hasty sketches,—and of a few glimmering right ideas ; before I could fully discover my way ;—or, by repeated comparisons of objects, perceive the traces of the road to truth ; in an investigation, which is yet of so much importance for the truest illustration of the most interesting parts of the history of mankind.

In the executing of the Engravings, it may be observed, that I have, in some instances, purposely chosen to give mere Etchings ; or even mere outlines ; rather than finished Copper-plates :—but I have done so, both to avoid increasing the expence of this work unnecessarily ;—and also, because such Etchings are not only quite adequate to the representation of such parts of antient Structures as are, on those occasions, described ; but do even, in a more characteristick manner, serve to mark precisely the minute differences, and distinctions, in the several parts, and periods, of Architecture, that are meant to be pointed out ;—for in engravings, upon a small scale, the effect of a very necessary small outline is too often rendered confused, and spoiled, by the shading, and high finishing of the adjoining parts ;—whilst a simple etching, of even the outline alone, conveys the right idea precisely.

I have only to add ; that it may appear to some persons, a want of accuracy ; that the Plates, instead of being all numbered in precisely correct arithmetical order, have frequently one or two

interveningly inserted ; and marked with the preceding number ; only with the addition of $\frac{2}{2}$, or $\frac{3}{3}$, or $\frac{4}{4}$.—But, in reality, the adopting this method arose from a determination to increase both the accuracy, and the utility of the whole work, by every means possible ;—as it was the only method of leaving an opportunity, during the printing, of inserting whatever might be *further* obtained capable of affording any better illustration.—For another reason also, this could not well be avoided ;—for the manuscript having been already, in great part, written, with references throughout, to a great number of original Drawings, and designed Plates, which had been precisely numbered.—No additional Plate could have been inserted afterwards, from time to time ; nor the first arrangement of any of the Drawings have been changed ; unless in this manner ; without deranging all the subsequent references throughout the whole manuscript ; and occasioning so much confusion as would have utterly barred any addition ; correction ; or improvement, whatever.

Now then it only remains to be said ; that ANTIENT RUINS are, in this latter period of the world, become some of the best means of aiding us to trace out, by their different peculiar styles, the different peculiar characters, dispositions, and acquirements of different successive ages ;—for almost every age has had its peculiar marks, and character, left strongly impressed on the style, and manifest design of all its buildings.—And in these sheets, justice has been endeavoured to be rendered to all ;—neither ascribing merit, from an idle veneration for Antiquity, to such æras, and Structures, as abounded with rude blunders ;—nor depriving any, of the credit of those extraordinary exertions, which were wonderfully made, in the midst of the greatest disadvantages ;—and under circumstances, in which a fierce, hardy, race of men, dwelt in ignorance ; and sometimes, almost literally, in *darkness visible* ;—serving an hard warfare, with few comforts of life, and with still fewer improvements of the mind.

The gloomy Mansions of Saxon, and of Norman days, strike the mind oftentimes with awe, and reverence.—But however wondered at ;—they cannot often be sincerely praised :—nor be compared with the admired elegance of Grecian, and Roman Structures.—They have, however, frequently such a rude sublimity of thought and design manifested in their Architecture ;—as produces uniformly an effect upon the mind, far surpassing any ideas of grandeur that could possibly be excited, by the more regular rules of Grecian art, even when aided by Roman greatness.

They were unhappily, in general, most horrible Mansions, either of War and Desolation,—or of blind Superstition and Imposition.—And indeed their best recommendation was ; that they were occasionally Protections also, against ferocious and savage barbarity ; which could hardly have been avoided any otherwise ;—and Residences, where sometimes were nurtured, and cherished, those admirable spirits of intelligence, by whose honest labours Science was not only restored in the world ; but made, at last, to rear its head with redoubled vigour.—Much oftener, however, were they the cradles of that very state of ferocity, and stupid ignorance, that generally prevailed ;—and that bore down all before it ;—and, indeed, the very instruments of *maintaining* violence, and oppression.

Much does it import us, in these days, to be watchful ;—lest a licentious disposition, on the one hand ;—artful imposition on the other ;—and an abuse of the advantages we have enjoyed,—should insensibly drive us back to a situation, wherein again may be wanted such *Castellated Mansions*,—to protect us, in like manner, against almost forgotten cruelties ;—against revived barbarity ;—and against modern savages :—and, lest again should be wanted, no less gloomy dens, to preserve and cherish whatever real Science, and good meaning may be left in the world.

For all that has been good in the world, appears very much to have been, in its first root, merely *derivative* ;—and only the due

cultivation of Divine instruction ; and of certain principles of rectitude, and ingenuity, first imbibed from the information and guidance of those who went before us ;—and then brought to maturity, by reflection, and diligence.—And even what are called *Inventions* ; are (when fully considered) found to be only additional branches of improvement, proceeding from the first vast stem.

Whatever may be philosophically (as it is called) fancied, or concluded, concerning the innate faculties of the human soul ;—and its own powers of exertion ;—experience has now taught us, in every age, and in every climate, that it is totally unable of itself, and by its own energy alone, to emerge from barbarism, and ignorance ;—or to produce, without external assistance, and borrowed light, the boasted improvements of art, and of civilization.

The New Hollanders ;—the South Sea Islanders ;—the Kamtschadales ;—the Indians both of North and South America ;—and the Negro Inhabitants of Africa ;—are all standing proofs of this fact :—having advanced very little, if at all, during so many centuries, beyond the bare supply of the wants and necessities of nature, in the rudest manner ; as first taught them, by those wretched, wandering, ignorant parents, from whom, in those respective countries, they derived their antient descent.*

* The wretched condition of human nature, in a barbarous state :—cast down, (as all mankind, when left devoid of heavenly help, and in a fallen state, *originally* are,) has not been sufficiently attended to, by those who have, by means of God's mercy, been delivered from the horrors of it.

Perhaps—even the wretched *Cannibal Disposition* of the *Carribbee Indians* ; and that of the *New Zealanders* ; and of other barbarous people ; was originally brought upon them, by a sort of imagined *necessity*, either in their very narrow insulated, or else in their barren situation, of finding food ; when, (for want of industry ; and for want of the assistance of better informed minds, who had never yet reached their shores, to teach them a right cultivation of their land, and of the powers of their minds) they could hardly find even sufficient sustenance, unless by such an horrid device, as that of *devouring* their supposed enemies ;—enemies who had nothing to be plundered of except their bodies, that could supply the pressing want.

And *whence-soever* the very earliest inhabitants of Asia derived their skill in Architecture, and other noble Sciences ;—whether it was directly by inspiration from heaven ; or by tradition from the sons of Noah, who had carefully preserved, as far as they possibly could, the most valuable and useful knowledge which the human mind had been inspired with in its best estate ; nothing can be more plain, to a careful Observer of History ; or to a faithful Investigator of Antiquity, than that from *the Noachidæ*, (of whose inspired skill the very building of the *Ark* itself was a great proof,) either immediately, or mediately, all the rest of the civilized Nations upon earth, have derived the first dawnings of Art, and of Science ; however they may have advanced, or improved, any branch thereof since.

The whole progress of Civilization, and Improvement in this world, resembles, perhaps, with the closest analogy, the growth of a vast Tree ; watered from on high, with Divine light, and spreading its branches, indeed, over the whole earth ; but continually discovering its original trunk, and root ; without the support of which, not one branch has even grown to maturity.

Hence we have seen Egypt deriving Art, as well as the Science of Astronomy, from the Chaldæans ;—Greece adorned by skill, and ingenuity derived from Egypt ; and from the Persians ;—Rome profiting after the example of all these :—and when it had first imported, by *Mummius*, spoils of which it knew not the value ; producing afterwards still nobler specimens of Art, and Industry ; although the stern Consul's authority, would not have been by any means sufficient, *to make the Ship Masters repair the loss of Grecian works of Art*, according to his threats.—And lastly, we have seen all these Western parts of Europe adorned with, and profited, by imitations of Greek and Roman works, and elegance.

It is no wonder, therefore, if upon close investigation, we find the first dawnings of Architecture, in this country, to have been

derived, in fact, from its intercourse with the Carthaginians, and Phœnicians;—and to have been of *Syrian* origin:—and the next Improvements, to have been derived from the *Romans*; after their visits, and successes in this Island:—the succeeding ones, to have been, at first, a sort even of retrogradation;—and the mere efforts of such uncivilized invaders, as brought over their own imperfect ideas of Building; which they had already obtained in their respective native countries:—but the last vast increase of skill, and the glorious works it produced,—to have been in consequence of calm reflection, on the labours of past ages; and of the exertion of great ingenuity, fostered, and put in action, by due instruction; and drawn forth, by peculiar circumstances of situation, to the exertion of those faculties, which must ever be considered, in every age, as heavenly gifts; and of Divine original;—however, sometimes abused, or however improved.

If, therefore, that remarkable passage in Diodorus,* where he relates what he had learned from the writings of *Hecateus*, concerning a people called *Hyperboreans*, (because their Island is more remote from the cold freezing north wind,) that has so often been cited by various writers, as supposed to refer to the *Britons*, (though Diodorus names them not by *that name* here, as he does in other parts of his work;—and though one does not well know what to make of the part of the description, wherein it is said that they have a *double harvest* in each year;—if that passage does really refer to *them*, and to their *Druids*;—Then, when we find him saying, that “they have
“ a Magnificent Grove *τέμενός*;—and a Temple worthy to be spoken
“ of, adorned with many *ἀναθήματα*, consecrated devotements;—
“ which is of a circular plan;—and a sacred city adjoining, inhabited almost entirely by harpers; who, without intermission,
“ sing hymns in verse, with melody;—and that they have a language peculiar to themselves; but yet have connection with the

* Lib. II. 91, 92.—p. 154, 159, Wesselingii ed.

“ Grecians, and particularly with the *Athenians*, and *Delians*;—
 “ some of whom are said to have left *ἀνθημύματα*, *consecrated devotes*
 “ *ments* amongst them, inscribed with *Greek Letters* ;/—and that the
 “ Moon is seen from this Island, so as to appear absolutely *but a*
 “ *little distant from the earth*;—and so as that *τινας ἐπιχλῆς γεωδεις*
 “ *ἔχουσαν φανεράς*, it appears to have certain *terrestrial projections visible*
 “ *upon it* ;” —If all this did really refer to the *Britons* ; we can only
 conclude, perhaps, that the *double harvest* related to a reaping of
 both *corn*, and *hay*, in some of the more southern parts of Britain
 visited by the Phœnicians :—and that the Island had not been so
 entirely sequestered from the Grecians, in the south-west parts, as
 the Romans imagined.—And, with regard to the account concern-
 ing the Moon appearing *larger, and nearer to the Earth* ;—and their
 being able to perceive *certain terrestrial projections on its disk* ;—we
 can only conclude ; either that it imported no more than their
 taking more particular notice than other people of the comparative
 largeness of the *horizontal Moon*, from the elevated situation of some
 of their sacred Circles of Observation, (and because of its having its
 magnitude increased, *still more, by the haziness of an insular situation* ;)
 —and their taking more particular notice than others of the fixed
 outlines of distinction, between the shaded part of the apparent
 map, so visible on its disk, and the bright parts :—or else we must
 conclude, that they had a further degree, both of *Optical*, and
 of *Astronomical* Knowledge, derived from the more learned first
 branches of mankind, than even Cæsar was aware of ;—and which
 they still cultivated with some degree of care.

And if the accounts given us of their teaching their Science only
 in verses, and by memory ; and in so slow a manner, that twenty
 years were required to form an adept, be indeed true ;—this will
 somewhat account, both for its being so much concealed from the
 rest of the world ; and for its being lost, in the end.

That they really had Geometrical Science, as well as Astrono-

mical, may very fairly be concluded, from the evident design of the form of an *Ellipsis*, in some of their *Sacred Circles*:—and particularly from the exact *elliptical Bason*, which Borlase says, he met with, on *Karnbre Hill*, in Cornwall.

There cannot, however, be a doubt, but that this hidden mysterious science has been estimated by some persons too highly.—For, if it had not, it must, notwithstanding any concealments, have produced better effects than ever appeared.—And, in like manner, as to Druid Arts, and Magnificence;—those must also, by some persons, have been estimated too highly, even in early days;—when we find such accounts, as that given by *Dion Chrysostom*, of their administering justice, sitting on thrones of gold.

To discover what effects of science are certainly apparent amongst the Remains of British Antiquity; and with what sort of care any kind of derivative advantages seem to have been pursued;—either by the *Britons* themselves;—or by their various *Successors*, in a long succession of ages;—will be the purport of all the ensuing sheets.

CONTENTS.

BOOK I.

AN INVESTIGATION OF THE HISTORY OF THE WORKS OF THE
ANTIEN BRITONS.

| | PAGE |
|--|------|
| <i>Short Introductory Observations</i> - - - - | 1 |
| <i>Form, and Construction of the British Huts, and Towns</i> - - - | 13 |
| <i>Ambresbury Banks</i> - - - - | 13 |

CHAPTER I.

CONCERNING ABORIGINAL BRITISH FORTRESSES, AND HILL FOR-
TRESSES IN GENERAL: AND CONCERNING CAVES, AND HIDING
PITS.

| | |
|---|----|
| <i>Concerning Aboriginal British Fortresses, and Hill Fortresses in general: and concerning Caves and Hiding Places</i> - - - - | 17 |
| <i>Moel-Arthur</i> - - - - | 19 |
| <i>Herefordshire Beacon</i> - - - - | 20 |
| <i>Bruff, in Staffordshire</i> - - - - | 20 |
| <i>Moel-y-gaer, in Flintshire</i> - - - - | 21 |
| <i>One near Montgomery</i> - - - - | 21 |
| <i>Caer-Caradoc, near Longnor, Shropshire</i> - - - - | 22 |
| <i>Trer Caeri, in Caernarvonshire</i> - - - - | 22 |
| <i>Pennaen Mavr, Caernarvonshire</i> - - - - | 22 |
| <i>Carn Madryn, Caernarvonshire</i> - - - - | 25 |
| <i>Pen-y-Parc, Brecknockshire</i> - - - - | 25 |
| <i>Boduan, Caernarvonshire</i> - - - - | 26 |
| <i>Pen-y-Crug, in Brecknockshire</i> - - - - | 26 |
| <i>Dinas, near Llandudno, Caernarvonshire</i> - - - - | 26 |
| <i>Karnbre-hill, in Cornwall</i> - - - - | 27 |

| | PAGE |
|---|------|
| <i>The White Catterthun, in Angus, Scotland</i> | 27 |
| <i>The Brown Catterthun</i> | 28 |
| <i>Incidental Observations, concerning the Canoes, or Boats of the Britons</i> | 29 |
| <i>Fortress at Mouline, in Perthshire, Scotland</i> | 30 |
| <i>Incidental Observations, concerning the Vitrified Walls of some Fortresses</i> | 31 |
| <i>Fortress at Knock-ferrel, in Ross-shire</i> | 31 |
| <i>And in Calloway</i> | 34 |
| <i>Wharton Crag, Lancashire</i> | 34 |
| <i>Old Oswestry, Shropshire</i> | 35 |
| <i>Old Winchester, Hampshire</i> | 36 |
| <i>Vandebury, Cambridgeshire</i> | 37 |
| <i>Ape-Wood Castle, Staffordshire</i> | 37 |
| <i>Hill Fortresses in Cornwall</i> | 37 |
| <i>Cuer-bran, Cornwall</i> | 38 |
| <i>Castle-an-Dinas, Cornwall</i> | 38 |
| <i>On Bartine Hill, Cornwall</i> | 39 |
| <i>Maiden Castle, Dorsetshire</i> | 39 |
| <i>Maiden Bower, Bedfordshire</i> | 41 |
| <i>Hill Fortresses,—that have had Stone Buildings added,—or their names greatly changed</i> | 41 |
| <i>Craig-y-Dinas, Merionethshire</i> | 41 |
| <i>Billington Bury, Staffordshire</i> | 41 |
| <i>Castle Hill, Staffordshire</i> | 41 |
| <i>Hunsborough, Northamptonshire</i> | 41 |
| <i>Mowslow Castle, Derbyshire</i> | 42 |
| <i>Caergwrle, Flintshire</i> | 42 |
| <i>Delvin, in Strathmore, Scotland</i> | 42 |
| <i>Concerning British Caves,—and Hiding Pits</i> | 44 |
| <i>Instances of such in foreign Countries;—of high antiquity</i> | 44 |
| <i>On the Barbary Coast</i> | 44 |
| <i>In Syria,—near Aleppo, and Rama</i> | 45 |
| <i>Mention made of such by Jeremiah</i> | 46 |
| <i>Also in the time of Baldwin</i> | 46 |
| <i>Such in Hungary</i> | 46 |
| <i>In Mingrelia</i> | 46 |
| <i>Such in this Island</i> | 47 |
| <i>At Royston, in Hertfordshire</i> | 47 |
| <i>Near Crayford, in Kent</i> | 47 |
| <i>Near Feversham, in Kent</i> | 47 |
| <i>Near Tilbury, Essex</i> | 47 |
| <i>In the Island of Islay, one of the Hebrides</i> | 49 |
| <i>Hiding Pits, called Inverted Barrows</i> | 49 |
| <i>On the Coomb Hills,—near Croydon, Kent</i> | 50 |
| <i>On Moushold Hill, Norfolk</i> | 52 |

| | PAGE |
|--|------|
| <i>Near Winchester, Hampshire</i> | 52 |
| <i>Near Piddletown, Dorsetshire</i> | 52 |
| <i>On South Downs, Sussex</i> | 52 |
| <i>Near Lewes, Sussex</i> | 52 |
| <i>Near Winster, Derbyshire</i> | 52 |
| <i>On the Black Mountains, Caermarthenshire</i> | 52 |
| <i>Pen Pits, Somersetshire</i> | 53 |
| <i>In the Vale of White Horse, Berkshire</i> | 53 |
| <i>Sometimes even on Hill Fortresses,—as at Thetford, Norfolk</i> | 53 |
| <i>Hiding Caves of odd Construction in Ireland, in the county of Louth</i> | 54 |
| <i>Others at Hawthornden, Scotland</i> | 54 |
| <i>Hiding Pits in Minorca</i> | 55 |
| <i>In Majorca</i> | 56 |
| <i>In Syria,—and Palæstine</i> | 56 |
| <i>Account of one used by Josephus</i> | 56 |
| <i>Others, used by Simon, and John</i> | 57 |
| <i>Caves in Idumea, attacked by Herod</i> | 58 |
| <i>Different kinds of Hiding Pits in Cornwall</i> | 59 |
| <i>Near Kildrumy Castle, Scotland</i> | 59 |
| <i>In the Western Isles</i> | 60 |
| <i>The Giants' Cave, near Penrith, Cumberland</i> | 60 |
| <i>Earth Houses in the Western Isles</i> | 61 |
| <i>Near Leith, in Scotland</i> | 61 |
| <i>Very singular Place of Refuge in Scotland</i> | 61 |
| <i>Illustration of several Passages in Holy Scripture</i> | 62 |
| <i>Comparison of Antient Hill Fortresses in the East, and in other Countries,</i> <i>with British Hill Fortresses</i> | 63 |
| <i>Mount Tabor, in Palæstine</i> | 66 |
| <i>Bethulia, in Palæstine</i> | 67 |
| <i>Some in America</i> | 68 |
| <i>In Sogdiana, in Asia</i> | 69 |
| <i>History of Jonathan, and his Armour Bearer</i> | 70 |
| <i>Capture of Dunbarton Rock, in Scotland</i> | 71 |
| <i>Capture of Fescamp Rock, in France</i> | 72 |
| <i>Maratloe Fortress, at Raree, in India</i> | 74 |
| <i>Amba Gesken, in Ethiopia</i> | 75 |
| <i>Huchilah, in the Wilderness of Ziph</i> | 75 |
| <i>Similar Fortresses, called Rathes, in Ireland</i> | 77 |
| <i>Their little Hillocks for Kitchens</i> | 78 |
| <i>Ardscul, in Kildare</i> | 78 |
| <i>Cnock Cuellaght, near Kilcullen</i> | 79 |
| <i>On Mullahmast Hill, in Kildare</i> | 79 |
| <i>On Sliabh Guth, Wicklow</i> | 79 |
| <i>On Castle Town Hill, in Louth</i> | 79 |

| | PAGE |
|--|------|
| <i>Near Down Patrick</i> - - - - - | 81 |
| <i>Smaller Mounts, even for private habitation, in Ireland</i> - - - | 81 |
| <i>Excavations on some antient Mounts</i> - - - - - | 82 |
| <i>Description of Old Sarum, Wiltshire</i> - - - - - | 82 |
| <i>Badbury Rings, Dorsetshire</i> - - - - - | 85 |
| <i>Wood Castle, in Annandale, Scotland</i> - - - - - | 88 |
| <i>Ecbatana, in Media; the Capital at Rome; and the Acropolis at Athens;</i> <i>had this sort of origin</i> - - - - - | 90 |
| <i>The City of David; the antient Hill of Jebus</i> - - - - - | 91 |
| <i>Hebron</i> - - - - - | 94 |
| <i>Observations concerning the Dresses,—Armour —and Appearance of the</i> <i>antient Britons</i> - - - - - | 96 |
| <i>Also concerning their Cars</i> - - - - - | 106 |

CHAPTER II.

CONCERNING STONES OF MEMORIAL.

| | |
|--|-----|
| <i>Jacob's Pillar; one of the earliest patterns</i> - - - - - | 114 |
| <i>Also his Pillar, and Heap, set up before Laban</i> - - - - - | 115 |
| <i>A third placed by him</i> - - - - - | 115 |
| <i>Traces of such Customs carried to America</i> - - - - - | 116 |
| <i>Pillar at Boswens Croft, Sauced, Cornwall</i> - - - - - | 116 |
| <i>Pillar at Enston, Oxfordshire</i> - - - - - | 116 |
| <i>Heaps of Stones,—Bonds of Covenant,—in the Island of Jona</i> - - - | 116 |
| <i>Stones placed as Landmarks,—in Syria,—and in Asia Minor</i> - - - | 117 |
| <i>London Stone</i> - - - - - | 117 |
| <i>Stone of Scone</i> - - - - - | 118 |
| <i>Stones set up by Joshua</i> - - - - - | 118 |
| <i>Stone of Shechem</i> - - - - - | 118 |
| <i>Stone of Abel</i> - - - - - | 119 |
| <i>Stone of Ebenezer</i> - - - - - | 119 |
| <i>Stones at Trelech, in Monmouthshire</i> - - - - - | 119 |
| <i>Devil's Arrows, near Burroughbridge, in Yorkshire</i> - - - - - | 120 |
| <i>Devil's Quoits, near Stanton Harcourt, in Oxfordshire</i> - - - - | 120 |
| <i>Battle Stone, near Kinfare, Staffordshire</i> - - - - - | 120 |
| <i>Stone at Leek, in Staffordshire</i> - - - - - | 121 |
| <i>Stone at Newbridge, near Cork, Ireland</i> - - - - - | 121 |
| <i>On Mary-borough Heath, in Queen's county, Ireland</i> - - - - - | 121 |
| <i>Stone in Brecknockshire, South Wales</i> - - - - - | 121 |
| <i>Stone in the Shire of Murray, Scotland</i> - - - - - | 121 |
| <i>Stone at Sowerby, near Halifax, Yorkshire</i> - - - - - | 122 |
| <i>Stone at Rudston, in Yorkshire</i> - - - - - | 122 |

| | Page |
|---|--------------|
| <i>Stones in the Isle of Arran, Scotland</i> | 122 |
| <i>Others in Long Island</i> | 122 |
| <i>In the Isle of Herryes, and in the Orkney Isles</i> | 122 |
| <i>Stone near Capel Kirig, Caernarvonshire</i> | 122 |
| <i>Stone in Kildare county, Ireland</i> | 122 |
| <i>Also in the county of Dublin, in Ireland</i> | 122 |
| <i>In the Island of Anglesey</i> | 122 |
| <i>In Sweden—and in Denmark</i> | 122 |
| <i>Account of the Pillars of Hercules</i> | 123 |
| <i>Of the Pillars of Bacchus</i> | 124 |
| <i>Of the Pillars of Sesostris</i> | 124 |
| <i>Stone set up by Theseus, in Peloponnesus</i> | 125 |
| <i>Stone of Bethlehen;—Rachel's Pillar</i> | 126 |
| <i>Pillar of Ilus</i> | { 126 270 |
| <i>Pillar on the Barrow of Achilles</i> | 127 |
| <i>On that of Hector</i> | 128 |
| <i>On that of Elpenor</i> | 128 |
| <i>Such designed for Ulysses</i> | 129 |
| <i>Pillar or Barrow, near Tullagh, in Caterlogh, Ireland</i> | { 129 270 |
| <i>Stone placed by Harold, in Jutland</i> | 129 |
| <i>Pillars in the later ages of the Britons, with rude Carving</i> | 130 |
| <i>So also in Eastern countries: in Egypt; in India; and even in Persia</i> | 130 |
| <i>In Syria, near the river Aradus</i> | 131 |
| <i>Pillars on Easter Island; on Tinian; and on other barbarous Islands</i> | 131 |

CHAPTER III.

CONCERNING CIRCLES OF MEMORIAL; OF OBSERVANCES; AND OF
OBSERVATION.

| | |
|---|-----|
| <i>Stones placed by Moses, at Mount Sinai</i> | 133 |
| <i>Stones placed by Joshua, on the banks of Jordan</i> | 134 |
| <i>Stone Circles in Media</i> | 136 |
| <i>Various uses of Stone Circles;—for Civil, Superstitious, and Astronomical purposes</i> | 137 |
| <i>The Astronomers' Stones, near Cader Idris, in Merionethshire</i> | 141 |
| <i>Another such Circle, called Buarth Arthur, in Caernarthenshire</i> | 142 |
| <i>Circle at Stanton Drew, Somersetshire</i> | 143 |
| <i>Circle of Fiddess Hill, in the Highlands of Scotland</i> | 144 |
| <i>Circles in the Isle of Arran</i> | 145 |

| | PAGE |
|--|------|
| <i>Circle near the Bay of Mull</i> - - - - - | 145 |
| <i>Circles near Snowdon, in Wales</i> - - - - - | 145 |
| <i>Circle near Keswick, in Cumberland</i> - - - - - | 146 |
| <i>Circles on Hartle Moor, and on Stanton Moor, Derbyshire</i> - - - - - | 146 |
| <i>Circles of Election, and Inauguration</i> - - - - - | 146 |
| <i>Circle at Boscaven-un, in Cornwall</i> - - - - - | 147 |
| <i>At Classerness, in Lewes, one of the Western Isles</i> - - - - - | 147 |
| | 156 |
| <i>Coronation Stone in the Isle of Ila</i> - - - - - | 147 |
| <i>Inauguration Stone, in Donegal, Ireland</i> - - - - - | 147 |
| <i>Other Inauguration Stones, in Ireland</i> - - - - - | 148 |
| <i>Custom of Kings, and Chieftains, standing by Stones, or Pillars, in very antient times, in the East</i> - - - - - | 148 |
| <i>Pillar of Shechem</i> - - - - - | 148 |
| <i>Saul made King at the Circle of Stones in Gilgal</i> - - - - - | 148 |
| <i>Stone of Zohelath, where Adonijah stood</i> - - - - - | 149 |
| <i>Jehoash stood by a Pillar</i> - - - - - | 149 |
| <i>Josiah stood by a Pillar</i> - - - - - | 149 |
| <i>Cesar's account of the consecrated place for the Druids' Courts, in Gaul</i> | 150 |
| <i>Epiphanius's account of a Circle in Syria</i> - - - - - | 150 |
| <i>Homer's Elders are said to sit in a Circle of Stones</i> - - - - - | 151 |
| <i>Similar Customs found even amongst the Indians in America, derived from the first Migrants</i> - - - - - | 152 |
| <i>The Council of Alcinous sat on stones</i> - - - - - | 152 |
| <i>Circles for holding Courts in the Isle of Man</i> - - - - - | 153 |
| <i>Also in Germany,—and in Norway</i> - - - - - | 153 |
| <i>Circle of Stones in Greece</i> - - - - - | 153 |
| <i>Circles for Observances of Turnings, and for Dances;—in Virginia, in America; and also in Canada</i> - - - - - | 154 |
| <i>Dances of the Dervises, remains of these original Customs</i> - - - - - | 155 |
| <i>Probable mode of distinguishing the Circles of Stones for Dances</i> - - - - - | 155 |
| <i>One of thirty-eight Stones, in North Wales, near Clenenny</i> - - - - - | 155 |
| <i>One in the Shire of Angus, in Scotland</i> - - - - - | 155 |
| <i>In the Island of Tire-iy, one of the Western Islands</i> - - - - - | 156 |
| <i>In the County of Roscommon, in Ireland</i> - - - - - | 156 |
| <i>Near Winterborn, in Dorsetshire</i> - - - - - | 156 |
| <i>Near Oldeer, in Scotland</i> - - - - - | 158 |

CHAPTER IV.

CONCERNING SACRED CIRCLES, WITH ALTARS OF OBLATION.

| | PAGE |
|---|------|
| <i>Stone Henge, in Wiltshire</i> - - - - - | 159 |
| <i>Imitations of Altars of Oblation, amongst the Superstitious and Idolatrous Usages in the South Sea Islands</i> - - - - - | 167 |
| <i>Bowing Stone, in the Western Isles</i> - - - - - | 174 |
| <i>Altars in Virginia</i> - - - - - | 174 |
| <i>Illustration of the history of Balaam's Sacrifices</i> - - - - - | 177 |
| <i>Druidical Temple discovered in the Island of Jersey</i> - - - - - | 190 |
| <i>Arbelows, near Bakewell, Derbyshire</i> - - - - - | 194 |
| <i>Circle of Stones near Penrith, in Cumberland</i> - - - - - | 196 |
| <i>Mayborough also, near Penrith</i> - - - - - | 196 |
| <i>Avenue of Stones, near Penrith</i> - - - - - | 197 |
| <i>Circles in the Shire of Merris, in Scotland</i> - - - - - | 198 |
| <i>Circle in the Orkney Island</i> - - - - - | 198 |
| <i>Roll-rich, in Oxfordshire</i> - - - - - | 199 |
| <i>Stones formerly at Addington, near Town Malling, in Kent</i> - - - - - | 199 |
| <i>Abury, in Wiltshire</i> - - - - - | 200 |
| <i>Account of antient High Places</i> - - - - - | 204 |
| <i>Such even described by Homer, on the Coast of the Pylians, &c. &c.</i> | 207 |

CHAPTER V.

CONCERNING CROMLECHES.

| | |
|---|-----|
| <i>Kil's Cotty House</i> - - - - - | 210 |
| <i>Investigation of the real intended use, and design of Cromleches</i> - - - - - | 218 |
| <i>Imitations of the early horrible Human Sacrifices, carried with the early Migrators into America</i> - - - - - | 223 |
| <i>The Altar at Mexico</i> - - - - - | 223 |
| <i>Cromlech at Bodwyn, in Anglesey, a truncated Pyramid</i> - - - - - | 224 |
| <i>Cromlech in Syria, belonging formerly to the Tyrians</i> - - - - - | 225 |
| <i>Cromlech, near Poitiers, in France</i> - - - - - | 229 |
| <i>Cromlech on Trescaw, amongst the Scilly Islands</i> - - - - - | 230 |
| <i>Human Sacrifice in this Island, so late as the ninth Century</i> - - - - - | 231 |
| <i>Such horrible Custom continued late in Iceland</i> - - - - - | 231 |
| <i>Cromlech, at Plas-Newydd, in Anglesey</i> - - - - - | 231 |
| <i>Cromleches, though not Monumental Structures, often connected with Places of Sepulture</i> - - - - - | 232 |

| | PAGE |
|---|------|
| <i>Double Cromlech, near Trevor, in Anglesey</i> | 235 |
| <i>Double Cromlech, nine miles from Holyhead, near Boddedem</i> | 237 |
| <i>Another, still nearer to Holyhead</i> | 237 |
| <i>Others also, in Anglesey</i> | 237 |
| <i>Heads of persons slain, found by Germanicus, on trees, in Groves, near the German Altars of the Druids</i> | 237 |
| <i>Account of the double meaning of the word Grove; in Scripture</i> | 238 |
| <i>Cromlech and Carnedde, between Barmouth and Harlech, Merionethshire</i> | 239 |
| <i>Others, not far from Cader Idris, and Circles of Stone</i> | 239 |
| <i>Another, at Bryn-y-Voel, near these</i> | 240 |
| <i>Cromlech, in Caernarvonshire, and Carnedde</i> | 240 |
| <i>Three others also, in Caernarvonshire</i> | 240 |
| <i>Cromlech in Circle of Stones, at Neven, in Pembrokeshire</i> | 240 |
| <i>Cromlech, in Llan-Hammwlch, Brecknockshire</i> | 241 |
| <i>The Giantesses' Stone, in Cardiganshire</i> | 241 |
| <i>Altar Stone, in Lhan Goedmor Cardiganshire</i> | 241 |
| <i>Altar Stone, near Llan Ederu, Glamorganshire</i> | 241 |
| <i>Another at Keyn Bryn, near Penrise, Arthur's Stone</i> | 242 |
| <i>Three in St. Nicholas's Parish, Glamorganshire</i> | 242 |
| <i>Cromlech, in Lhav-Boudy Parish, Caermarthenshire</i> | 242 |
| <i>Cromlech in St. Helier's Parish, Jersey</i> | 243 |
| <i>Another in Jersey, with a Caruedde, or Tumulus</i> | 243 |
| <i>Others in the same Island</i> | 244 |
| <i>Cromlech in Guernsey</i> | 244 |
| <i>Cromlech at Lanyon, in Cornwall</i> | 245 |
| <i>Cromlech at Portisham, in Dorsetshire</i> | 245 |
| <i>Cromlech in Lothian, in Scotland</i> | 245 |
| <i>Cromlech at Oldeer, in Scotland</i> | 245 |
| <i>Cromlech at Castlemary, in Cork, in Ireland</i> | 246 |
| <i>The Warriors' Bed; or Hags' Bed; in Cork, in Ireland</i> | 246 |
| <i>The Giant's Grave, near Sligo, in Ireland</i> | 247 |
| <i>Cromlech, with Bones, in Louth, in Ireland</i> | 248 |
| <i>Another, called the Killing Stone</i> | 248 |
| <i>Imitations of Cromleches since the Druidical times in Ireland</i> | 250 |
| <i>Imitations also of Druidical Circles, in the County of Dublin</i> | 251 |
| <i>Also near Dungannon, in Tyrone, in Ireland</i> | 251 |
| <i>Cromlech, near Fairy Rock, in Corn, in Ireland</i> | 252 |
| <i>Near Loch Cool, Galway, Ireland</i> | 252 |
| <i>On a Mountain near Baltinglass, in Wicklow, in Ireland</i> | 252 |
| <i>Near Dundalk, Louth</i> | 252 |
| <i>Near Dundrum, Down</i> | 253 |
| <i>Near Drumgoolan, Down</i> | 253 |
| <i>In Tyrone, near the verge of Derry</i> | 253 |
| <i>At Tobin's Town in the County of Carlow</i> | 253 |

CONTENTS.

xxix

| | PAGE |
|--|------|
| <i>On Brown's Hill, near Carlow</i> - - - - - | 253 |
| <i>Cromleches, in the Island of Minarca</i> . - - - - | 254 |
| <i>Also in Friesland</i> - - - - - | 255 |
| <i>In Germany, near Salzburg</i> - - - - - | 256 |
| <i>In Lower Saxony</i> - - - - - | 256 |
| <i>References to Cromleches in the Mosaic Law</i> - - - - | 256 |
| <i>Idea of the rude Mode of rearing these Masses</i> - - - - | 259 |
| <i>Many instances of vaster Masses reared, and used in buildings, in various Countries</i> - - - - - | 262 |

CHAPTER VI.

CONCERNING BARROWS, CAIRNS, AND KISTVAENS.

| | |
|--|--------------|
| <i>Reasons for believing almost all our Barrows to be British</i> - - - | 267 |
| <i>Investigation of the History of Barrows, in the Countries first inhabited</i> | 269 |
| <i>The Barrow of Patroclus, and Achilles;—an early specimen of the mode of rearing such Mounds</i> - - - - - | 270 |
| <i>Barrow, near Tullagh, in Ireland</i> - - - - - | { 129 270 |
| <i>Barrows in Phrygia</i> - - - - - | 271 |
| <i>Barrows near Sardes</i> - - - - - | 273 |
| <i>Barrow of Alyattes</i> - - - - - | 273 |
| <i>Barrow near Ægina</i> - - - - - | 274 |
| <i>Barrow on the Plain of Marathon</i> - - - - - | 274 |
| <i>Barrow of Laius</i> - - - - - | 274 |
| <i>Barrow of Tydens</i> - - - - - | 275 |
| <i>Barrow of Hephestion</i> - - - - - | 275 |
| <i>Barrow of Abradates, and Panthea</i> - - - - - | 275 |
| <i>Barrow between Mesopotamia and Assyria</i> - - - - - | 275 |
| <i>Barrows in China</i> - - - - - | 276 |
| <i>Pyramids in Egypt</i> - - - - - | 276 |
| <i>Barrows in Siberia</i> - - - - - | { 278 285 |
| <i>Vast Antiquity of Barrows</i> - - - - - | 282 |
| <i>That of Epylus, in Arcadia, antient in Homer's time</i> - - - | 282 |
| <i>Barrow of Nimus</i> - - - - - | 283 |
| <i>Barrows, or Cairns, reared by Joshua and the Israelites</i> - - - | 283 |
| <i>Cairn, or Barrow, raised over Absalom</i> - - - - - | 284 |
| <i>Barrows of the Indians in North America</i> - - - - - | 284 |
| <i>Barrows also of the Indians in Peru</i> - - - - - | 285 |
| <i>Cairns in Minorca</i> - - - - - | 286 |

| | Page |
|--|------|
| <i>The Danish Barrows derived from the Customs of the same Celtic Ancestors; but few, if any Danish Barrows in Britain</i> | 286 |
| <i>Barrows in Sweden</i> | 287 |
| <i>Barrows in Lower Saxony</i> | 287 |
| <i>Barrow not far from Drogheda, in the County of Meath, in Ireland</i> | 288 |
| <i>Barrow at Tullagh, in Caterlogh</i> | 291 |
| <i>Barrow, near Douth, in Meath</i> | 292 |
| <i>Barrow, near Blagdon-house, by Buth, called Fairy's Toote</i> | 293 |
| <i>Cairn, or Barrow, near Plas-Newydd, in Anglesey</i> | 294 |
| <i>Other Cairns, or Barrows, in Anglesey</i> | 294 |
| <i>Silbury Hill, near Abury, in Wiltshire</i> | 295 |
| <i>Barrow, on Fin Cop Hill, Derbyshire</i> | 296 |
| <i>Barrow, at Merden, Wiltshire</i> | 297 |
| <i>South Long Barrow, Wiltshire</i> | 297 |
| <i>Barrows near Stone Henge</i> | 298 |
| <i>Barrow at Wilton</i> | 298 |
| <i>Barrow at Marlborough,—not such</i> | 298 |
| <i>Shipton Hill, Dorsetshire</i> | 298 |
| <i>Barrow at Cossington, Leicestershire</i> | 299 |
| <i>Julaber's Grave, near Chartham, Kent</i> | 299 |
| <i>Clear distinction between the Interments of the Romans, and of the Britons</i> | 300 |
| <i>Roman Coffins, at Chesterford, &c.</i> | 300 |
| <i>Also near Colchester</i> | 301 |
| <i>Roman Interments near Mansfield Woodhouse, Nottinghamshire</i> | 301 |
| <i>Roman Interments at Ash, in Kent</i> | 302 |
| <i>Roman Interment near York</i> | 303 |
| <i>Roman Interments near Stratzburg, in Germany</i> | 303 |
| <i>Barrow at Trelech, Caermarthenshire, Krig-y-Dyrn</i> | 303 |
| <i>Barrow Hill, near Ruthin, Denbighshire</i> | 304 |
| <i>Barrows in Merionethshire</i> | 304 |
| <i>Harnsley Hill in Northumberland</i> | 304 |
| <i>Barrow near Aldborough, Yorkshire</i> | 304 |
| <i>Barrow at Winster, Derbyshire</i> | 305 |
| <i>Barrows on Barham Downs, Kent</i> | 305 |
| <i>Barrows on Exmore, Devonshire</i> | 306 |
| <i>Barrow near Pakefield, in Suffolk</i> | 306 |
| <i>Long Barrow, near Pinpern, Dorsetshire</i> | 307 |
| <i>Nine Barrow-Down, Dorsetshire</i> | 307 |
| <i>Barrow near Wareham, Dorsetshire</i> | 307 |
| <i>Hambury-Toote, Dorsetshire</i> | 308 |
| <i>Barrows near East Lulworth, Dorsetshire</i> | 309 |
| <i>Other Barrows in Dorsetshire</i> | 309 |
| <i>Barrows near the Vale of White-Horse, in Berkshire</i> | 310 |

| | PAGE |
|---|--------------|
| <i>Dragon-Hill</i> - - - - - | 310 |
| <i>Barrows near Chichester, viz. Four Barrow Hill</i> - - - - - | 310 |
| <i>Near Barrow in Lincolnshire</i> - - - - - | 311 |
| <i>Barrows at Aldfreston, Sussex</i> - - - - - | 311 |
| <i>Tumuli near Whitby, in Yorkshire</i> - - - - - | 311 |
| <i>Cairn, in Craven, in Yorkshire</i> - - - - - | 312 |
| <i>Tumuli on Barrow Hill, near Yealand, in Lancashire</i> - - - - - | 312 |
| <i>Barrow at Oddington, Gloucestershire</i> - - - - - | 312 |
| <i>Tumuli in the Links of Skail, in the Orkneys</i> - - - - - | 313 |
| <i>Tumulus near Strunness; and others in the Orkneys</i> - - - - - | { 313 314 |
| <i>Tumuli near Sundford, in Westmoreland</i> - - - - - | 314 |
| <i>Barrow at Ellenborough, in Cumberland</i> - - - - - | 315 |
| <i>Barrow on Middleton Moor, in Derbyshire</i> - - - - - | 316 |
| <i>Barrows at Aggleston, in the Isle of Purbeck</i> - - - - - | 316 |
| <i>Barrows on the South Downs, in Sussex</i> - - - - - | 316 |
| <i>Barrows on Chatham Downs, Kent</i> - - - - - | 317 |
| <i>Barrows on Blackheath, and others</i> - - - - - | 317 |
| <i>Barrows in Shepey Island</i> - - - - - | 317 |
| <i>Barrows in Cornwall</i> - - - - - | 318 |
| <i>Barrows in the Scilly Islands,—the latest of any</i> - - - - - | 318 |
| <i>Battle Barrows</i> - - - - - | 319 |
| <i>Hackingdon Banks, Kent</i> - - - - - | 319 |
| <i>At Barrow, in Suffolk</i> - - - - - | 320 |
| <i>At Wardlow, near Ashford, in Derbyshire</i> - - - - - | 320 |
| <i>Near Raisgill, in Westmoreland</i> - - - - - | 320 |
| <i>On Crosby Carrot Manor, Westmoreland</i> - - - - - | 321 |
| <i>Near Battle-hill Cunseway, in Hampshire</i> - - - - - | 321 |
| <i>In South Low Field, Staffordshire</i> - - - - - | 321 |
| <i>Odd square Barrow, at Biggar, in Teifdale, in Scotland</i> - - - - - | 322 |
| <i>Odd Interment of Charlemagne</i> - - - - - | 323 |
| <i>Illustration of the various forms of Barrows</i> - - - - - | 325 |

CHAPTER VII.

CONCERNING LOGAN, OR ROCKING STONES;—AND CONCERNING
TOLMEN;—AND BASON STONES.

| | |
|---|--------------|
| <i>Traces of them in Asia, near Harpasa</i> - - - - - | 328 |
| <i>The Cygonian Stone</i> - - - - - | 328 |
| <i>Rocking Stone at Colcar Hill, near Halifax, in Yorkshire</i> - - - - - | { 328 330 |
| <i>Another at Riskworth, in Yorkshire</i> - - - - - | 329 |

| | Page |
|---|------|
| <i>The great Quoit at Karn-le-hau, Cornwall</i> | 329 |
| <i>One at Castle Treryn, Cornwall</i> | 329 |
| <i>Another on one of the Scilly Islands, St. Agnes</i> | 329 |
| <i>Rocking Stone at Men-anber, in Cornwall</i> | 329 |
| <i>Rocking Stone between Knaresborough and Shipton, Yorkshire</i> | 330 |
| <i>Rocking Stones near Warton Crag, in Lancashire</i> | 330 |
| <i>Rocking Stone on Hathersage Moor, Derbyshire</i> | 331 |
| <i>Another on Stanton Moor, Derbyshire</i> | 332 |
| <i>Rocking Stone, amongst the Brimham Rocks, Yorkshire</i> | 332 |
| <i>Two others also,—and a Tolmen</i> | 332 |
| <i>And a large one, with evident marks of the Tool</i> | 332 |
| <i>Robin Hood's Mark, on Ashover Common</i> | 333 |
| <i>Vast Rock Pillar, amongst Brimham Rocks</i> | 333 |
| <i>Intended, but unfinished Rocking Stone</i> | 334 |
| <i>Another such in the Island of Purbeck, Dorsetshire;—Aggleston Stone Barrow</i> | 270 |
| <i>Great upon Little, at Hoadley, in Sussex</i> | 336 |
| <i>Rocking Stone near St. David's, Pembrokeshire</i> | 336 |
| <i>Rocking Stone on the Kells Rins, in Galloway, in Scotland</i> | 337 |
| <i>Rocking Stone near Newland, in Gloucestershire</i> | 337 |
| <i>Rocks that seem to have been intended to have been used by the antient Britons, for Superstitious purposes</i> | 338 |
| <i>Wring Cheese in Cornwall</i> | 338 |
| <i>Another on Saltonstall Moor, in Yorkshire</i> | 338 |
| <i>So in Rishworth Township</i> | 338 |
| <i>So also Robin Hood's Penny-stone</i> | 338 |
| <i>Tolmen, in Constantine Parish, Cornwall</i> | 339 |
| <i>Tolmen in the Scilly Islands</i> | 339 |
| <i>Rock near Timbridge</i> | 340 |
| <i>One also like a Druid's Seat</i> | 340 |
| <i>British Banks, and Dikes</i> | 342 |
| <i>Concluding Remarks</i> | 343 |

ERRATA.

Page 98, line 5, for *Celtes*, read *Cells*.

120, l. 4 from bottom, for *Kinver*, read *Kinfare*.

274, at the bottom, for *Wostenii*, read *Wesselingii*.

325, l. 9 from the bottom, dele, on the other side.

MUNIMENTA ANTIQUA.

BOOK I.

AN INVESTIGATION OF THE HISTORY OF THE WORKS OF THE
ANTIENŒT BRITONS.

INTRODUCTION.

TO trace the progressive improvements of mankind, in various countries; to contemplate nations emerging from barbarism to a state of civilization; and to discover, with any degree of perspicuity, the means by which these gradual improvements have been made; is surely one of the most interesting speculations afforded to the human mind.

It effectually tends to awaken in us an humble sense of our own original low estate, and insignificance, amidst created beings.

It insensibly calls forth a tribute of most grateful thanks, to the Great Creator and Lord of all; who amidst the confusion of turbulent spirits, during their first state of trial, and opportunity of action, is continually causing all things to tend insensibly to arrangement, and order. And who so disposes of all events, that whilst, during their progressive state, the different tempers, and disorderly passions of a successive race of ignorant and sturdy free agents, do unavoidably produce mischief, He is yet, from age to age, continually bringing forth good out of evil; and promoting the best final welfare of all.

It leads us, with due regard and affection, to venerate those, by whose energetic efforts and labours, though under manifold disad-

vantages, the human mind has been continually pressing forwards: and in consequence of whose honest endeavours, guided by Almighty help and goodness, the dawn of art, and of science, and of a meliorated state of things has appeared.

And the natural effect of the whole contemplation, whilst we rejoice in such advantages as we have now obtained beyond our predecessors, is to excite in our minds still further efforts, for the promoting increase of good order, arts, science, industry, and ingenuity; and of whatever may best tend to the general welfare of mankind, and to the higher improvement of future ages.

When with due reflection we behold the wretched, almost naked, aboriginal Briton, in his hovel in the woods, * feeding upon nuts and acorns; or at best living only a very little better than a New Zealand savage;

When we rightly consider the real condition of the fierce invader Saxon, besmeared with blood; proudly quaffing a vile intoxication from the excavated skull of his enemy, in imitation of the fabulous dire revels in *Woden's* hall; and incapable of any quiet enjoyment of life;

When we reflect upon the sturdy Norman, cased in steel, for the

* It is most curious to observe *the contempt* with which the Romans spoke concerning Britain; as a place which had not any thing, *worth relating*, concerning it; † a country *utterly barbarous*; in the *extreme part* of the earth. ‡ *

Its inhabitants, *savage to strangers*; *totally uncivilized*; and even, *neither visited by, or conformed to*, the enlightened parts of the earth.

The inhabitants of New Holland are hardly considered by us in so inferior a light, as the Britons were considered by the Romans.

Perhaps the time may come, when *our ideas*, concerning the inhabitants of New Holland, may be considered, and remarked upon, in the same manner, in which we now consider the words of *Horace*, *Diodorus*, and *Strabo*.

In the mean time it may be worthy of intelligent attention, also to remember the light in which *King Agrippa*, before whom Paul delivered his energetical apology, considered the Britons, in a speech recorded by *Josephus*; which, from its style and composition, and every circumstance attending it, there is the utmost reason to believe was truly original; and, as such, had a copy of it delivered, by *Agrippa* himself, to the venerable author.

† *Strabo*, lib. iv. 190—p. 289. *Amsterdam* ed. *Diodorus*, lib. iii. 120—p. 204. lib. v. 203—p. 346.

‡ *Horace* *Carm.* lib. i. *Ode* 35. v. 30. lib. ii. *Ode* 4. v. 35. *Epod.* lib. *Ode* 7. v. 7.

maintenance of the rights of his liege lord, and of his own fiefs; proudly imitating the lobster in his fancied security; and serving a bitter warfare all the days of his life, as the price of his inheritance; without means of duly cultivating either his land or his mind;

When we justly apprehend, what it must have been to have lived under such circumstances; how is it possible to avoid turning the eye of the mind instantly, to the easy industrious yeoman; or to the quiet manufacturer; in the days of Queen Elizabeth; or rather to the Courtly Knight of that glorious reign? and much more, how is it possible to avoid contemplating the present race of men; and their manifold advantages in the various ranks of society; however unworthy they may be of them, or however those advantages may be abused?

This extraordinary person, King Agrippa, who built those walls about Jerusalem, that were, at last, its greatest strength; * and who to the last laboured to save the Jews from their final immediate cause of destruction; endeavouring to dissuade them from their revolt against the Romans, by setting before them the power, and successes of that people, whom he considered as *instruments* in the hands of the *Almighty God*; said, amongst other things, endeavouring to shew their invincible strength;

“Nay, indeed, they have sought for another habitable earth, beyond the ocean; and have carried their arms as far as such British islands, as were never known before. † Do you, also, who depend on the walls of *Jerusalem*, consider what a wall the Britons had? For the Romans sailed away to them, and subdued them, while they were encompassed by the ocean, and inhabited an island that is not less than the continent of this habitable earth;” (or in other words, an island like a sort of continent, just as we might now say of *New Holland*.)

And then Agrippa intimates, that yet, at that time, only four legions were sufficient to guard such an acquisition.

Again, speaking of Vespasian, who was, as it were, from this island led to the empire of all the world, he says, “He had also recovered to them (the Romans) *Britain* by his arms, which had been little known before: whereby he procured to his father *Claudius* to have a triumph bestowed upon him, without any sweat or labour of his own.”

And it even appears that the distinction of having *Claudius* called his father, was an honour bestowed in consequence of these conquests in Britain; a country so newly discovered, and acquired.

Titus also, when persuading the Jews to surrender, admonished them to consider, what greater obstacle to the Roman arms there could be, than the walls of the ocean with which the Britons are encompassed? ‡

* Josephus de Bello Jud. lib. v. cap. 4. sec. 2. † Ibid. lib. ii. cap. 16. sec. 4.

‡ Ibid. lib. vi. cap. 6. sec. 2.

Who would leave, willingly, the comfortable English mansion of a private gentleman, for the dull castle of a Norman Baron; the den of a Saxon Thane, even when settled in peace; or the gloomy wood of a British Chief?

Or who would exchange the advantages, which the very lowest class of the industrious and active poor enjoy in this country, (even amidst our worst mistakes and errors), for the naked, starving, licentious condition of a savage Briton? or for the bitter servitude and bondage of a Saxon slave? or for the situation of a Norman Villein, *regardant*, or *in gross* (the original Gentleman Copyholder); who, notwithstanding his fancied possession of landed property (the only property then in the kingdom), might be conveyed, in the one instance, as part of the stock on the land, by deed of conveyance, from one lord of a manor to another; and in the other instance, might even be granted, as an individual, by deed, to whomsoever his haughty chieftain pleased.* Whilst, in both instances, if lands were given by any friend, or distant relative, in fee, to such villein (or copyholder), his lord paramount alone would be entitled to the possession.

It is worth our while, then, amidst the many various investigations, concerning the progress of arts, and of human knowledge, that employ our minds, to bestow some inquiry *how*, and by *what gradual steps, and means*, such progressive alteration of manners, and of the modes of life has taken place, as has occasioned so great a change in the condition of mankind.

* See Coke, Littelton, p. 120. b. And to this great authority, I must add, that it appears from a most curious book, written on parchment, by the direction of Sir William Gryffiths (Chamberlain of North Wales), who preserved the valuable records of that country from perishing, by means of that collection of them which he so made; † that all the natives of a certain township, in Wales, many years after the time of the petty British princes, were sold as *part of the estate* of those lands they belonged unto.

It deserves also to be added, that Rowland ‡ tells us he had, in his own possession, a copy of an injunction, issued out even so late as by Henry VII.; commanding Escheators, and all other ministerial officers, to see that the king's *native tenants* kept within their common limits; and, if any of them were found to stray and wander from their houses, to drive them back, *like beasts to their pinfolds, with the greatest severity*.

† *Mona Antiqua*, p. 119.

‡ *Ibid.* 120.

A trite old proverb admonishes the inconsiderate, that, *one half of the world knows not how the other lives*: and it is still more true, and deserves attention; that those who live in one age of the world, have too little apprehension of the mode in which preceding ages have been passed by such as had their lot therein.

Yet perhaps in all countries, the progression may really be discerned to have been almost uniformly by somewhat the same steps; and from similar causes.

Savage stupidity, first gives place, and yields dominion to brutal ferocity. Brutal ferocity, then yields to brutal fierceness disciplined. This latter, at last, yields to Civilization, and the light of Truth. And when once Civilization, and any knowledge of God, has at all taken place; the advance of science, and the progress of arts, would soon raise the state of human society, in any country, to an high degree of prosperity; if there were but a due maintenance of *well regulated* principles of religion, and morality.

But alas! there, the progress is in every successive period too soon, for a time checked. The whole is too, too soon sadly counteracted, by selfish views; and by violent misguided passions.

And the combination of these last, continued banes of the human soul, produce such dire effects, from age to age, as to give us but little opportunity of carrying the speculations upon the advance of civil improvements, in any period of time, any further; than in each age to contemplate, with horror, the continued struggling efforts of true religious principle, and ardent zeal for public good; of science, and of industry; against the opposition of hypocrisy, the delusions of idolatry, superstition, selfish interest, vile lusts, passion, ignorance, and obstinate insensibility.

Amidst all those sundry, gradual, and almost imperceptible operating causes which have prepared the human mind to be open to the reception of improving knowledge; and which are the objects of the inquiry now proposed; but which have not perhaps, hitherto been sought after with the attention they deserve; the strange, varied, and sometimes detorted, progress of architecture, in its very various branches, surely forms one, that unquestionably ought not to be deemed either last, or least.

The improvements of Architecture, indeed, seem ever to have

been, above all others, the most *characteristic* marks of *improving civilization*: and at the same time, to have themselves contributed, more than ought else, to the promoting of it.

More, I may almost venture to say, than even the knowledge of letters; and the arts of writing, and of printing.

For the improvements of Architecture continually open new scenes to the imagination even of the most unlettered: and by causing them to feel themselves in a new situation, rouses their minds to new pursuits. And even with regard to retrospective view; whilst the exercise of the pen has been gradually called forth, to record any of the circumstances that gave occasion to the raising of the fabrics which were the manifestations of this art, the Fabrics themselves have continued to inform the world yet more fully: and still remain, as it were, speaking from age to age. Many of them relating a most interesting tale, long preceding, in its date, our first knowledge either of reading, or of writing.

A tale, that *will* be heard. For even that disgraceful *modern barbarity* (more inexcusable than that of the antient savages), arising from blundering stupid selfishness, and ignorance; which is continually demolishing the most interesting remains of high antiquity; cannot entirely hide from our eyes, those so legible characters, which still, in many instances continue, as *written in stone with an iron tool*; constantly declaring the vast efforts, which past generations made, in the midst of all their errors, to emerge from a state of sordid wildness. Whilst even the altars of idolatrous abominations, which deserved to be destroyed, still retain marks sufficient to inform us what sort of dire corruptions had taken place.

Surely then, it is worth our while, as one of the first steps towards a right comprehension of the progressive improvement of the state of mankind, to trace, as far as we are able, before they are more effectually destroyed, and before they utterly perish, the remaining indications of the slow gradual improvements of Architecture in this country; and to watch how changes of manners, and of laws, and of improvements in science, and in other arts accompanied them.

The examination of what remains in our own country, and the consideration of its gradual improvements in all these particular respects; is indeed what belongs most peculiarly to ourselves; and

demands the most properly our first attention. But the modes by which several other civilized nations, have at various periods, in all ages, arrived to such advantages as they obtained; are so exceedingly similar to, and so much connected with what has passed on this spot which we inhabit; that in carrying on the inquiry which relates to ourselves, we cannot but unavoidably find much light flung upon the history of the whole world; and upon several curious details in the antient records of many other regions. Records, which though continually perused by the learned, have too often, for want of the illustration that might have been derived from such sort of inquiries, been much misunderstood.

What kind of poor savages dwelt in this island, in some of the very early ages of the world; in the days of Moses, or of Solomon; or of Numa; or Nebuchadnezzar, or Cyrus, or Darius; (if this island had at that time any inhabitants at all besides the wild beasts of the forest); is perhaps of as little import to us now, as it is to know who the poor beings were who dwelt in New Holland, during the last three centuries.

Herodotus, who has so often, by persons wanting candour, been deemed too credulous; was with regard to this matter only too incredulous. For at the same time that he gravely tells us,* “ he could not forbear laughter, when he considered how some men described the circumference of the earth, *without any kind of judgment*, pretending that the ocean surrounds the whole, and that the earth *is made round, as if it came out of a turner’s lathe*; and that Europe is equal in extent to Asia;” he says also, † “ Neither can I assent to those, who tell us of a river, by the barbarians called Eridanus, which they say furnishes amber, *and runs northward into the sea*. Neither do I know any thing of the islands called *Cassiterides*, from the *tin* which is thence imported among us. And though I have diligently inquired, yet I have never seen any man, who by his own experience could inform me, concerning the nature of that sea, which bounds the extremities of Europe. However it is certain that *amber*, and *tin* come from the remotest parts.”

We may therefore, from these words conclude, that whatever

* Herodotus, ed. Wesselingi, lib. iv. 36—p. 297. † Ibid. lib. iii. 115—p. 254.

inhabitants there were of Britain, in the days of Herodotus, they were still in a state of such *utter barbarity*, as to be almost entirely unnoticed by the then civilized part of mankind. And we well know they continued in a very barbarous state, even down to the time of Cæsar, and Tacitus.

But although this venerable father of history, who dwelt amidst the first dawn of science in Greece, *could not believe the earth to be spherical*; and candidly confessed his ignorance of the geography of this part of the world; and of *the existence of any inhabitants in any such island as THIS*; yet what he says concerning *tin*, is a clear proof against his own doubts; and a proof that the coasts of Cornwall had been visited, previous to that time, by the Phœnicians; for there was no other part of the world then discovered, from whence that metal could be had.

We shall find reason to conclude, in the course of our inquiries, that we even still have remains of architecture in being, that were not only long prior to the time of the Roman invasion; but most probably prior to the days of Herodotus.

The remains I mean, are those called Druidical. With the examination of which therefore, together with the consideration of the traces of British Strongholds, it will be necessary to begin these Observations.

Wherever any such exist in this island; their vast antiquity must needs render any means of elucidation of their history no less interesting to us, than the history of the Pyramids of Egypt has been, for so many ages, to all the world. And though, in the one instance, as well as in the other, perhaps no full information concerning their *original* construction, is to be expected from any positive records of history; yet we shall find the remains may speak with sufficient clearness for themselves, on a careful comparison of them with one another; with the antient remains of other countries; and with the usages of the very earliest ages of the world, as described in the oldest writings, and from the first traditions of mankind.

Several of them indeed must, as individual specimens, still continue subject to the having much doubt formed in our minds, concerning their precise original destination, and use; both on account

of their present mutilated state, and because of the great simplicity, and rudeness of the original design at best: but enough concerning them will become perfectly intelligible, in consequence of such a comparison, to explain to us, what many of these antient works, of such immense labour, were really intended for, when first constructed:—and how many different kinds there were of them: to some one or other of which, those mutilated fragments (whose more particular history must still continue in some obscurity) did yet doubtless originally belong.

Whoever the people were, who first passed over from the Continent to this Island, we may be well assured they had been previously connected with some of the first inhabitants of the more civilized parts of the earth; as they must have passed over in artificial vessels of some construction or other. And therefore we may well expect to find, in some of their strongholds, and works of rude architecture, a connection with modes of defence, usages, rites, and ceremonies, practised in other parts more early inhabited in the very *first* ages of the world.

And as this resemblance will indeed soon strike a contemplative mind, in the strongest manner; so the continued illustration of the history of the remains which we behold in our own country, by means of the accounts of such transactions as passed in similar fortresses, and in the use of similar structures in other countries, (in those times of the highest antiquity, which are the subjects of the first dawnings of history), will supply the defect of actual records concerning the achievements of the first British inhabitants. Achievements that, except for the sake of explaining these curious remains, could not be at all interesting; nor of much more concern to us, than the fights of kites and crows,* as Milton most justly observed concerning the Saxon achievements, in the time of the Heptarchy.

The history of almost all aboriginal nations may be comprehended in very few words; like the account given in Scripture of the first inhabitants of Idumea.† Merely that persons of a certain

* Kennet's Collection of Historical Facts, Vol. I. p. 50. Hume's History, Vol. I. p. 20.

† Deuteronomy, chap. ii. v. 10, 11, 12. v. 20, 21, 22, 23.

name dwelt there; fierce, strong, contentious, destroying, and perhaps deserving to be destroyed.

But, amidst all these disadvantages, the human mind would unavoidably make some exertions; in consequence of which appeared surprising works of defence; and also other as surprising works, the effects of blind superstition, and of immense labour.

These efforts alone have produced all that it is now of any concern for us to know, with regard to any aboriginal people; or with regard to the aboriginal Britons.

It is the observation of one of the most diligent and laborious searchers after British antiquities, (the ingenious, and learned Rowland,*) that the works, and employments, of the first colonizers of any country, and especially of an island, (which could have been inhabited only subsequent to the occupation of the adjacent continent) must have been merely those of hewing down the woods, and of hunting; to which we may add that of fishing. And that such first inhabitants could not have had either time, or inclination, to form any very fixed habitations.

With regard to our own country then, we may begin with remarking, that as far as the Romans knew any thing of them, it was not till the time of Agricola, that the Britons were persuaded to live at all in a social, and comfortable manner; to build convenient and tolerably commodious stationary dwellings, contiguous to each other; to form regular towns; or to attempt to adorn them, with such structures as halls, and temples.+

And we find that in the more remote parts, where civilization arrived so many ages later; in the Highlands, and most northerly parts of Scotland; there was not, in the time of Ptolemy, † in the middle of the second century, so much as one British town among nine nations.

As to the particular *private abodes*, therefore, even of the most considerable chieftains of the Britons, they must unavoidably have been dwellings nearly resembling rude tents, and hovels; easily removeable; and incapable of leaving any very durable remains

* *Mona Antiqua*, p. 20—27. † Tacitus, *Vita Agricolæ*, C. 21.

‡ See his *Geographical Account*, and compare the different parts of it.

behind them. And the huts of the people in general must have been chiefly of such kinds, as we now meet with amongst various barbarous and uncivilized nations, in the most remote parts of the globe. Small hovels, formed of loose stones, with sticks, and boughs; and covered with grass, or reeds; nearly like those described by many of our navigators, and travellers, in the South Sea islands; in Africa; and in America.

Perhaps then, it will not be a degradation of the idea to be formed, concerning the aboriginal private dwellings in this island, if we venture to compare the cabbins of the first migrators, and hunters here, with such as are still used by the poorer wandering inhabitants of the mountainous, and of the yet most uncultivated parts of it.

The curious Mr. Cordiner* thus describes one, that he met with in the northern parts of Scotland:

“ In Dirry-more forest, on passing through this level tract, numerous herds of cattle came in view. Near to one of the grassy fields where they were feeding was reared the keeper’s booth; the most wretched hovel imaginable. With difficulty we crawled into it; and one could not stand upright when within. Yet here, was straw for a bed; a bottle of milk; and some pieces of bread. *It is possible* men may be contented with such spare accommodation; with such hard and scanty fare. I strove in that cot to find shelter from an heavy rain; but soon found such confinement seem worse than an open exposure to the severest weather.”

The range of ravenous beasts in the lower woods and valleys, made *those* spots originally dangerous to dwell in, and only fit for the scenes, and employments of hunting. And the hills alone, at first, were the only fit places even for any abodes at all.† Here, therefore, both in Wales,‡ and in the island of Anglesey,§ and in Scotland; and elsewhere in our own country, where they have had the possibility of being left undisturbed by subsequent cultivation, are to be met with remains and traces of the most antient dwellings of the first people.

* Antiquities of Scotland, p. 111.

† Mona Antiqua, p. 25.

‡ Pennant’s Tour in Wales, Vol. II, p. 306.

§ Mona Antiqua, p. 27.

These, as far as they are now capable of minute examination, are found to have been mere clusters of little round, or oval foundations of stone; on which were erected small structures, with conical roofs or coverings, which formed the very circumscribed dwellings, and rude hovels, of the first settlers in Britain.

In places of great natural strength and safety, or of much convenience in point of peculiar situation, it is easy to conceive they most abounded.

And in some of these, in the more inaccessible mountains, although they continued to be, from age to age, sometimes the abodes of soldiers, as being fortresses of great natural strength; yet the original foundations and walls of such poor original little hovels do still remain; not having been subject, in consequence of their peculiar situation, to be eradicated, either by the magnificence, or necessities of succeeding generations; who could have no inducement to destroy such poor vestiges of pristine security, for the sake of the materials.

But, besides these, some clusters of antient dwellings were, by degrees, constructed in deep woods, and morasses; and near rivers; in such parts, even of the Lowlands, as were fittest for security: and such became afterwards, in many instances, great Cities: some in the times of the Romans; and others in the times of the Saxons.

Amongst these Lowland clusters of huts, or *bods*, we may justly deem one to have been even the first origin of *London*: whose early existence, as a place of habitation, in some state or other, for the first aboriginal inhabitants, was thought, by the curious author of the *Parentalia*,* to be sufficiently ascertained, both from the British name; and also from the different kinds of interment, discovered in distinct successive strata, one beneath another, on digging the foundations of St. Paul's Cathedral; from whence it clearly appeared a greater number of Britons must have at the same time dwelt together with the Romans, than could have been supposed to have inhabited there, if it had been merely in its origin a Roman colony.

They first found, deep under the graves of the later ages, and in a row (or stratum) below them, the burial places of the Saxon times:

* *Parentalia*, p. 264.

where the graves were either lined with chalk, or stone; and some had stone coffins. And again below these, were discovered Roman urns, and many British graves: in the latter of which were found numbers of ivory pins; and pins of an hard wood, seemingly box, about six inches long.*

With regard to these last kinds of Lowland towns, and fortresses; the traces of which, as to their precise form, (like the traces of many of those on the mountains), and the figure of their huts, must now unavoidably be almost entirely destroyed; we may yet learn, from Cæsar's description of one of the most considerable of them, what kind of places they were.

Speaking of that which was the capital of Cassivellaunus, where a vast multitude of men, and of cattle, were cooped up together, he says,† “The Britons call a place a town, when they have fortified “thick impassable woods, by means of a vallum and fosse;” (in other words, by means of an high bank, and a ditch): “in which “sort of place they are accustomed to get together, to avoid the invasion of enemies.”

And indeed we have one spot remaining even to this very hour, which notwithstanding all the alterations that have been made, of boundary lines passing through it, and of roads cut through it, yet in reality so completely answers this description, when its original situation is duly considered, and its still woodland state; that we can scarcely doubt of its having been truly a Lowland British town; the nearest, of any connected with that which at last became London. And this is the well known old intrenchment, near Copt-hall in Essex; called *Ambresbury-banks*. It is nearly of an oval form,‡ and contains an area of about twelve acres.

The word used for the first kind of houses that could possibly exist in these sort of towns; that is for the huts the Britons constructed; it plainly appears was merely, *booth*, or *bod*.|| And even their best towns we find were clearly understood to be universally, mere assemblages of such huts.

* Parentalia, p. 266.

† De Bello Gallico. lib. v. sec. 17.

‡ A Plan and Description of it may be seen in Gough's Camden, Vol. II. p. 49, and Pl. I. fig. 4.

|| Whitaker's Manchester, V. II. p. 263.

After all the best inquiry that Strabo could make, “The woods (he says*) are their towns. For having fenced round a wide circular space, with trees hewn down, *there* they place their huts (κλυσσοποιουνται), and fix stalls for their cattle; but not of long duration.”

And speaking in another place† of the Gauls, whose customs and manners were so similar to those of the Britons, and which therefore, to avoid repetition, he often describes as having a reference to them, he says,

“They have dwellings, of a round form, constructed of poles, and wattled work; with very high pointed coverings, of beams united at a point.”

Thus also Diodorus Siculus, mentioning more precisely the habitations of the Britons themselves; tells us, “they have very poor wretched dwellings, composed for the most part of reeds, (or straw), and wood.‡” From whence we may conclude that, though of the same form, they were in general of still less dimensions, and of less nice construction than those of the Gauls.

In short, that they were little round hovels, formed of poles united to a point at the top, and covered with reeds or straw, placed upon low circular walls, or banks, of rough stones, or earth.

Entirely consistent with all these descriptions, is the appearance of those remains which Rowland met with in Anglesey; and so justly apprehended to be vestiges of the abodes of the aboriginal inhabitants.

“I have oft observed, (he tells us||) in many places in this island, and in other countries, clusters of little round, and oval foundations; whose very irregularities speak their antiquity. On the hills near Porthæthwy there are prodigious plenty of them; and upon some heaths. The very make and figure, and other circumstances of these rude misshapen holds, seem to indicate that they were the retreating places of those first people (who migrated here), when they began the work of clearing, and opening

* Strabo. lib. iv. p. 200, of the Paris ed. p. 306, of the Amsterdam ed.

† Strabo. 197, p. 501. ‡ Diodorus Siculus. lib. v. 209, or p. 347, ed. Wess.

|| Mona Antiqua, p. 25, 26, 27.

“ the country ;—very necessity obliging those people then, as custom does some to this day, to choose such moveable abodes :—
 “ and no one can well deny these to have been little *dwellings*, and
 “ houses.”

And even in lower situations, in some instances ; and particularly, on a piece of ground called Trev-wry, near the river Breint, he tells us there are a great many such circular stone foundations.*

Hence, therefore, we may obtain even something more than an imperfect idea, of the common dwellings of the aboriginal inhabitants of Britain, in the earliest ages.

But notwithstanding it be true, that the first settlers could have leisure only for the construction of such rude habitations ; and for the exercise of as rude occupations : yet when they were once well established, we may be assured they would form some important, and lasting places of defence ; and also establish some monuments of their religion, customs, and superstitions.

And here we shall begin to have an ample field for satisfactory inquiry ; and a means of obtaining a very considerable illustration of all antient history : at the same time that we endeavour, in the fairest manner, to discover the first dawnings of Architecture, both military, and religious, in this island.

At first sight, the appearance of the scattered remains of Druidical superstition, and of British works, only produces a succession of confused ideas in the mind ; and they are even liable to be confounded with the works of later ages : whence some writers have been led into great mistakes concerning them. But on a careful assortment of their different kinds, and on a careful comparison of those of each class, in different and remote parts, one with another, this difficult knot of the clue, leading to the discovery of truth, gives way ; and we may plainly discern, that British, and Druidical monuments, are all to be arranged under the description of the following different kinds, viz.

1. British posts ; or Strongholds : together with Caves, and hiding places.
2. Stones of memorial.

* *Mona Antiqua*, p. 88.

3. Circles of memorial; of Observance; and of Observation.
4. Sacred circles, with Altars of oblation.
5. Altars for sacrifice, and divination.
6. Kistvaens; or tombs.
7. Barrows, and cairns.
8. *Logans*; or Rocking stones.
9. *Tolmen*; and Bason stones.

And these different kinds will well deserve to be investigated, as far as we are able, in regular order.

CHAPTER I.

CONCERNING ABORIGINAL BRITISH FORTRESSES; AND HILL FORTRESSES
IN GENERAL. AND CONCERNING CAVES, AND HIDING PLACES.

THERE are a vast number of strong Intrenchments in all parts of this island, of a very peculiar kind: situated chiefly on the tops of *natural hills*; and which can be attributed to none of the various different people who have ever dwelt in the adjacent country, except to the antient Britons; although indeed the subsequent conquerors, Romans, Saxons, and Danes, and even the Normans, have, on certain emergencies, made use of them at different times; on account of their great original strength: and although the erroneous hasty conjectures of persons ill informed, for want of more experience, and even the crude reports of the country, have often called them Roman camps; Danish forts; or Saxon intrenchments.

They could not be originally of Roman construction; because we well know, that wheresoever the Romans certainly did form any camps, and stations, either in this island, or abroad, they always were of a very different sort.

They could not be Danish; both because they do not resemble such as we assuredly know to have been constructed by those marauders, in their invasions: and because those pirates would neither in their ravages, venture so far inland as several of these works are found to be; nor stay to undertake the excessive labour of raising them, on such high hills and mountains as they are often placed; nor run the risk of being cooped up, and starved there, when they had done so.

And as they were not the works of those people during their state of piracy; so neither can they be deemed to have been fortresses designed by them, when they had obtained an establishment here.

For the great Castle built by Canute at Norwich; the Great

Tower at Bury; and other works of theirs; shew that they had *then* arrived at such a state of improvement in point of civilization, and of architectural skill, as to fortify themselves in cities, and within strong walls: when they did not use merely temporary camps; and not to be driven to the shift of contriving such places as these, for stationary defence.

Neither could these intrenchments have been originally the works of the Saxons.

For, even during the Heptarchy, we shall find fortresses of *stone* were erected; and are still subsisting; of a far different sort. And the remains of Architecture of the ages of Edgar, and Alfred; and the latter's well known complaint of *there being few Castles in England*; together with the specimen of the Great Castle of his son Edward the Elder at Colchester; and their strong cities mentioned in history; shew that they had far different ideas of security, and of protecting themselves against invaders, than would correspond with a dependance on the forming these kind of retreats.

Besides, indeed, we shall find several instances, in the sequel; where their mere earthworks, when for temporary convenience they did ever construct such, were encampments on plain ground; with *double ditches*; and with either the whole, or at least part of the area *raised above the level of the adjacent country*; and sometimes with a very small mount for watch guard. And quite different from those either of the Danes, or Normans.

And as to the Normans themselves; their magnificence; and the great Castles still remaining, which they constructed, in different periods; puts it quite out of the question to allow even the least conjecture of *their* having had any share in casting up the works of these retreats, and intrenchments; which are most properly the first objects of our attention.

They must therefore have been the strong posts, and fastnesses, of the antient Britons, the first settlers in this island. Where they lodged their wives, and their children, on account of any sudden war or invasion; and to which they drove their cattle, at the same time, from the low adjacent country. Here they formed garrisons; and made their stand; and from hence they sallied forth, with confidence, to repel the foe.

And that such were by these people, first devised and fortified for this use, appears most evidently from the account given of British fortresses by *Tacitus*. For describing the strongholds formed, and resorted to by *Caractacus*, he says,*

Tunc montibus arduis, et si qua clementer accedi poterant, in modum valli saxa præstruit.

Which we may very well translate; “*Then they fortified themselves on steep mountains; and wherever there was any possibility of access in any part, he constructed a great bank of stones, like a vallum.*”

Mr. Pennant instantly saw so strongly the exact conformity of this description, with one of these sort of intrenchments still remaining on a mountain hanging over the vale of Nannerch, in Flintshire, in North Wales; and called *Moel Arthur*; that he could not forbear immediately to apply it; and to form the right conclusion concerning these hill fortifications. †

Moel Arthur, is on one of the high summits of the mountain; a smooth terrace being levelled on the top of all, and having, on the only accessible side, where there are not precipices, two ditches of prodigious depth, with suitable dikes.

Many others of these fortresses are rendered defensible exactly in the same manner: but there are sometimes more deep ditches; and high banks, formed either of earth or *loose stones*: and there are sometimes only one; though more often two entrances.

They were indeed such as might well defy an enemy: as similar ones often did, in various other countries, even from the time of *Alexander the Great*, (as related by *Quintus Curtius*, ‡) down to the time of *Agricola*.

But their situation being so high that they could have no supply of water, except from the clouds, they were often liable to be untenable for a long season, from that very circumstance alone; though their situations amongst hills, subject to much wet, gave the defenders of them a better chance in this respect, than they could have had in other places.

One of the most important, and most considerable of these fastnesses, in our country; is situated on a spot, that could not but be

* *Annalium*, lib. xii. sect. 33.

† *Tour in Wales*, p. 412.

‡ *Quintus Curtius*, lib. vii. c. 11.

an object of the utmost attention to the original inhabitants of those territories, which afterwards were deemed distinctly England, and Wales, from the very division here formed.

It is on the summit of one of the highest of the Malvern ridge of hills; and is now known by the name of the Herefordshire Beacon; commanding that which was once the *only* pass through them, from the one side to the other; and which indeed is very nearly so to the present hour.

This has sometimes been called, without the least proof or reason to form any such conclusion, a *Roman camp*. It has also been called a *Danish camp*; with still less ground for any such conclusion. It has been talked of as being *Saxon*. And, because the tradition of the country still preserves the curious memorial of the fact, that Owen Glendour, or *Glyndwr*, made use of it as one of the fastnesses, to which he resorted in his distresses, (as he did to several of this sort,*) it has been sometimes idly supposed, to be one of his works.

But the construction of the whole stronghold, shews it to have been formed for a more important use than he, and his refugees, could ever make of it.

Its extent is so great, as to shew it was designed for the security of an whole adjacent country, on any emergency.

And the access to its summit is to this day so exceeding difficult; that, almost for that reason alone, it has been so seldom accurately surveyed.

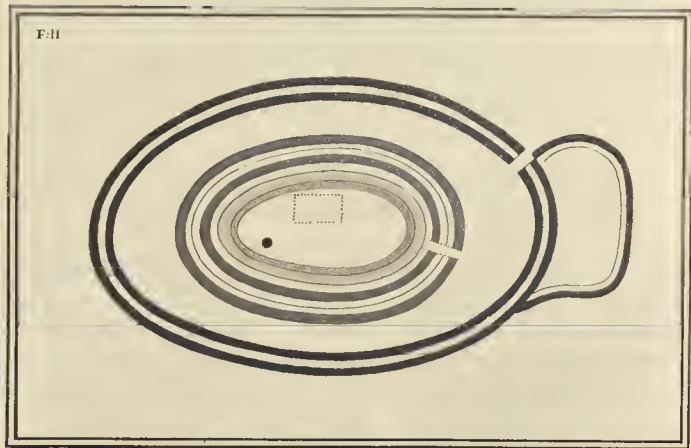
A view of its appearance on the NE side, is placed as a Frontispiece to this Book.

Pl. I. fig. 1. Is a plan of the roots, or foundation of the mountain; and of the several works formed on its sides and summit.

a Is the area of the camp; on the very highest part. An irregular oblong, of 175 feet in its longest diameter; and 110 in its shortest; surrounded by an high steep vallum (or bank) of stones and earth, now covered with turf; and by a very deep ditch on the outside.

b An exceeding large outwork adjoining; situated much lower

* Of his being confined to fastnesses on hills; see Pennant's account of this Chieftain, in his *Tour in Wales*; p. 359.



Plans of the Herefordshire Beacon, & White Catter-thum.

E. K. del. F. I.

G. Richardson, & Son, Sculpt.



down; resembling a sort of bastion: and containing a large area, for the stowage, and even pasturage of horses, and cattle; and surrounded by another high bank, and deep ditch. This lies S W by S of the upper camp.

c Another similar large area, of a bastion-like form, for the same purpose; and exactly on a level with the former; situated easterly; and also surrounded by an high bank, and ditch.

These two plains have manifestly been constructed with great care; every advantage having been taken of the natural form of the hill, which has been levelled, in this part, as far as possible. A narrow plain slip of land (*d*), formed beneath one side of the ditch that surrounds the upper camp; and secured by means of the same high bank and ditch that surrounds the two bastion-like plains; unites both of them together.

The three shaded circular lines at *eee*, represent other banks and ditches, with steep slopes; defending the sides of the mountain, from all access.

P Shews the old pass into Herefordshire, from Worcestershire; now improved, and converted into a turnpike road.

RR The ridge of the rest of the Malvern hills; running nearly S W by S and N E by N.

fffff The foot, and roots of the hill on which this fortress is situated.

Pl. II. fig. 1. Shews the appearance of this curious fortress; as seen at a considerable distance, in the vale beneath, in Herefordshire.

Somewhat similar to this, is a fortress at Bruff, in Staffordshire; which was visited by Mr. Pennant.* It is, as he describes it, placed on the summit of an hill, surrounded by two deep ditches, and a rampart *formed of stone.*† The area not of any regular shape, but complying with the shape of the hill; and having two of the corners *projecting naturally, and forming a species of bastions.* The only approach crept up the steep sides of the hill, and divided about midway, one branch to the right, and the other to the left.

* See his Journey from Chester, p. 47.

† *i. e.* Exactly agreeable to the description given by Tacitus, and before referred to.

Mr. Pennant seems to adopt too readily the ordinary ideas of the country; that this stronghold was cast up by Kinred king of Mercia, against Osred king of the Northumbrians: but consistently with his own judicious observations in other places; as well as from the precise form of its construction; it seems to have been of more antient date; and truly an original British fortress.

We have more of the same kind, distinguished and taken notice of by this curious traveller, and especially in his own country, than by any other writer. And the enumerating some of the most distinguished of them, will perhaps help greatly to confirm the distinction of these truly original strongholds, from those of subsequent ages.

Not far from Northop in Flintshire, a fortress of this kind, called *Moel y Gaer*, soars high above the road, on the summit of an hill. It has a great fosse, and dike of a circular form; and a small artificial mount within.*

On an hill not far from the Castle of Montgomery (and therefore most certainly utterly needless, unless it had been long prior to the erection of that castle), is another fortress; a stupendous British post; guarded by four great ditches; besides two or three other fosses across the hill, where it is least steep.†

And still another is distinguished by the name of *Caer Caradoc*,‡ near *Longnor*, in Shropshire; having the first ditch and rampart, in a part of the hill, where, from the exceeding steepness, they seemed even totally unnecessary; (which by the way is also the case with some of the ramparts on the side of the Herefordshire beacon;) and a little higher, a second ditch, with a vast agger of stones, now sodded over: the area at the top being irregular, as usual, and of pretty considerable extent.

Mr. Pennant was sufficiently convinced, that notwithstanding the near resemblance of its name, *this* was not the place where Caractacus was attacked by Ostorius; but was at a loss *where* to ascertain that spot; because of what is said of *the adjoining river*, by Tacitus. In the additions to Camden, || however, the Editor seems to have cleared

* Tour in Wales, p. 83.

† Ibid. Part II. p. 372.

‡ Ibid. p. 421.

|| Gough's Camden, Vol. II. p. 404. Where is also added a rough sketch from Dugdale's Visitation of Shropshire.

up this matter very well; having shewn, that the true *Caer Caradoc*, which, if not the royal seat of Caractacus, seems to have been at least his fortress, during the war with the Romans, was in Shropshire, two miles south of Clun, and three from Coxal. Being a large camp; three times as long as it is broad; on the point of an hill; accessible only one way; and defended on the north side by very deep double ditches, in the solid rock. Whilst on the east, the steepness of the ground renders it impregnable. And on the south it has only one ditch, for the same reason. And the principal entrance is on the west side; fenced with double works: whilst to the south-west it is even fenced with treble works. We have here therefore another instance of the true British style of fortifying.

But one of the most extraordinary of all these kind of fortresses; is one that seems to have been even an established stationary residence. And in which are found *still* remains of the foundations of the most antient kind of buildings, used by the Britons.

It is situated in Caernarvonshire; and is called *Tre'r Caeri*, or the *Town of the Fortresses*.* On the accessible side it was defended by three rude walls of stones; the upper ones being lofty, about fifteen feet high, and sixteen broad; exhibiting a grand and extensive front. The space on the top is an irregular area; but the whole is filled *with cells; some round, and some oval*; (answering to those which have before been mentioned, as described by Rowland;) and some also are oblong, or square. Some of the round ones were fifteen feet in diameter. Which brings to mind the Gallic houses described by Strabo. And of those that were oblong, there was at least *one*, even thirty feet in length.

Similar to this; and even still more worthy of attention; is the celebrated fortress in Caernarvonshire, on the top of *Penmaen Mawr*; the very existence of which, on account of the difficulty of access, has been denied by some hasty, injudicious persons.

“I have more than once visited,” says Mr. Pennant,† “the summit of this noted rock, to view the fortifications described by the Editor of Camden, from some notes of that sensible old

* The plan and elevation of this antient stronghold and abode, is given by Mr. Pennant in his *Tour in Wales*, Vol. II. p. 206.

† *Ibid.* Vol. II. p. 306, 307.

“ Baronet Sir John Wynn of Gwedir; and have found his account very just. The ascent is laborious. After leaving the inn, and passing a considerable way amidst small trees and brush wood, I attained the bare and stony part, or the *Braich y Ddinas* (*i.e.* the arms of the city); which rises in form of another hill out of this promontory, the height of which from the sands has been found to be 1545 feet.

“ After climbing for some space among the loose stones, the fronts of three, if not four walls presented themselves very distinctly, one above the other. In most places the facings appeared very perfect; *but all dry work*. I measured the height of one wall, which was at the time nine feet; the thickness seven feet and an half. Between these walls, in all parts, were innumerable small buildings, *mostly circular*, and regularly faced within and without; but not disposed in any certain order. These had been much higher, as is evident from the fall of stones, which lie scattered at their bottoms;—(Sir John Wynn supposed they had once the form of towers;—their diameter in general is from twelve to eighteen feet; *but some were far less; not exceeding five feet*. On the small area of the top had been a group of towers or cells, like the former; one in the centre, and five others surrounding it. Three are still distinct; of the two others are only faint vestiges. There are some appearances of there having been another similar group, at present reduced to a shapeless heap of stones. And near adjoining is a well cut in the live rock, and always filled with water supplied by the rains.”

This is the substance of Mr. Pennant's description. And surely the remains of the buildings *being circular*, and some of them not exceeding *five feet in diameter within*, clearly shews that they were the foundations of antient cells, bods, or huts, and not of towers as Sir John Wynn supposed; (which surely in such an inaccessible, unfrequented place, would not have been thus thrown down and reduced; when towers, really such, have so defied every thing except undermining, and the blasts of gunpowder, in situations of constant access, and exposed to all the means of destruction.)

At the same time the surrounding walls being all dry work, shew the fortress to have been British, according to the description given

by Tacitus, of their usual mode of fortifying. And the appellation *Dinas*, or *Ddinas*, shews it to have been professedly a fixed town, or abode, according to Rowland's observation,* that the word is derived from their *Dinesu*; *i. e.* from men's associating and bandying together.

There is a representation of the top, and of one side of this very antient fortress in the *Archaeologia*,+ which is accompanied by an ingenious memoir, wherein the author ‡ conjectures that it was a place consecrated to Druidical worship. And it is not at all improbable but that a part of the summit might be reserved for such purpose. But the manner in which the little circular foundations and remains of buildings are clustered together, plainly shew that a part also formed what its antient name imports; a town; and place of retreat. The well of water,|| on this vast height, rendered it peculiarly fit for such a purpose; and the walls, though rude, and at first sight, appearing low in their dimensions, are yet quite as strong as those met with in many other hill fortresses. When the experiment of climbing up upon them is attempted to be made, it sufficiently shews how inaccessible they must have been to an enemy.

Of a similar kind is the old fortress of Carn Madryn, in Caernarvonshire; which whatever its original age was, has been noted for having been a stronghold of the sons of Owen Gwynedd; Roderick, and Malgwn, so lately as A. D. 1170. For like Owen Glendwr, who lived still some centuries later, he and his sons occupied occasionally several of the more antient strongholds; and amongst the rest, one on the top of an hill called Pen y Parc, near Gegidoc or St. George.§ So true is it, that these sort of places not only were strongholds, and fortresses in the earliest British times; but were also deemed capable of being such even in much later ages.

Mr. Pennant describes Carn Madryn as being** a lofty, rocky, insulated hill; the bottom, sides, and top of which are filled with *cells, oblong, oval, or circular*; once thatched or covered from the inclemency of the weather: many of them being still pretty entire.

* *Mona Antiqua*, p. 25.

+ Vol. III. p. 305. Pl. XIV. p. 352. Pl. XXIX.

‡ Governor Pownall.

|| Mentioned in the *Archaeologia*, Vol. III. p. 306.

§ *Tour in Wales*, Vol. II. p. 336.

** *Ibid.* Vol. II. p. 194.

The chieftains resided on the top of the hill: the inhabitants of the adjacent country, with their cattle, in times of invasion, occupied the sides, and bottom: and the whole summit was surrounded with a wall, still visible in many places.

Of a like kind, he says, is the hill of Boduan, in Caernarvonshire, above Nefyn, covered with *similar cells*.*

Some British strongholds, however, which remain pretty entire, in other respects, have yet all the traces of their small *bods* quite destroyed. Amongst which may be reckoned one little known, on the summit of a high hill, two miles nearly north-west from Brecknock, in South Wales. It is called Pen y Crug; and is of an oval figure, surrounded by three very deep and broad intrenchments. Mr. Strange + very justly observes it is one of the most curious, and best preserved remains of the kind throughout the whole principality.

On a great eminence called *Dinas*, near Llandudno, ‡ Mr. Penant informs us, is a large enclosure. The edge of the hill is surrounded with a rude wall; and within are multitudes of *small circular hollows*, about twelve feet in diameter, environed with walls, such as are found on *Tre'r Caeri*. And near this place is a *Maen Sigl* or rocking stone, a great one, whose point of contact with the ground is so small as to make it moveable with the least touch. Which antient remain, is alone the strongest proof that can be of the British origin of the neighbouring fortress; and shews, that here was also some part adjacent dedicated to religious rites; as Mr. Pownall supposed was the case at Penmaen Mawr.

The same was the case at Karnbre hill in Cornwall, so fully described by Dr. Borlase; || which still more nearly agrees even with Cæsar's description of a British town; because here was once a thick impenetrable wood.

This hill is high, and its area on the top is thick set with karns or groups of rocks; the spaces between and below which, were even in the memory of the last generation filled with a grove of oaks. *Now* indeed there are no trees; but the places

* Tour in Wales, Vol. II. p. 207.

† Archaeologia, Vol. I. p. 297.

‡ Tour in Wales, Vol. II. p. 332.

|| In his Antiquities of Cornwall, p. 117.

where those trees were charred, or burnt into charcoal, are still to be seen.

The summit is divided into two unequal areas; one of which still called the *Old Castle*, is surrounded by a wall similar to what we have been describing elsewhere; and is admitted by Dr. Borlase to have been unquestionably, a fortress. And here again, near adjoining, are found several *circular foundations*; which (although Borlase calls them holy circles,*) seem plainly (at least some of them) to have been mere foundations of such kind of circular dwellings, or *bods*, as those met with in other remains of British towns, and strongholds.

And whilst we are endeavouring to illustrate the true nature of these aboriginal remains, by the examination of such as continue to preserve sufficient traces of their original construction and importance; it would be unpardonable not to mention the *Catter-thuns*, in the shire of Angus, in Scotland: which are decidedly to be reckoned amongst the most antient Caledonian strongholds; coeval with what we have been calling British posts.

They are thus described by Mr. Pennant, whose description I shall beg leave to borrow, and make use of, nearly in his own words.†

“ After riding two miles on black and heathy hills, we ascended
 “ one divided into two summits; the higher named the white, the
 “ lower the black *Catter-thun*, from their different colours. Both are
 “ Caledonian posts; and the first of most uncommon strength. It
 “ is of an oval form, made of a stupendous dike of loose white
 “ stones, whose convexity from the base within to that without, is
 “ a hundred and twenty-two feet. On the outside a hollow made
 “ by the disposition of the stones, surrounds the whole. Round the
 “ base is a deep ditch, and below that about a hundred yards, are
 “ vestiges of another, that went round the hill. The area within
 “ the stony mound is flat; the greater axis or length of the oval is
 “ four hundred and thirty-six feet; the transverse diameter, two
 “ hundred. Near the east side is the foundation of a rectangular
 “ building; and on most parts are the foundations of others *small*,

* Page 118.

† *Tour in Scotland*, Part II. p. 157.

“ *and circular*: all which had once their superstructures, the shelter
 “ of the possessors of the post. There is also a hollow, now almost
 “ filled with stones, the well of the place.

“ The other is called the *Brown* (or *Black*) *Catter-thun*, from the
 “ colour of the ramparts, which are composed only of earth. It is
 “ of a circular form, and consists of various concentric dikes. And
 “ on one side of this rises a small rill, which running down the
 “ hill has formed a deep gully.

“ The literal translation of the word *Catter-thun* is *Camp-town*.
 “ And these posts are both of the same kind with that made by
 “ *Caractacus*, on the borders of North Wales. But the former of
 “ them is the most remarkable.”

A representation of this aboriginal fortress in the north parts of this island, as seen at a distance, is added in the same Plate with that remarkable one which I have before described as existing in the south part: See Pl. II. fig. 2.

And a plan of it is given, Pl. I. fig. 2. copied from Mr. Pennant's very nearly; the only difference being, that this is drawn entirely as a plan, without any shading to make it appear like a bird's eye view.

A somewhat similar British fortress, is to be seen on the top of an hill, near the valley of *Glen-elig* in Inverness shire.* It is diked round with stone, and in the middle is the vestige of a *circular* enclosure.

And there is another, now called *Wardlaw*, in the county of Dumfries. It is on the top of a small hill, and surrounded with two fosses.† And in a morass called *Lockermoss*, a very little distance from it, was dug up in 1736, an antient canoe, used by the first rude inhabitants of these parts; which (like the rocking stones before mentioned,) bears testimony to the high antiquity of these neighbouring aboriginal strongholds; shewing that the near adjacent country was certainly occupied in the earliest ages.

The canoe that was dug up in 1736, was seven feet long, and dilated to a considerable breadth at one end. And its paddle was found at the same time in the morass near to it.

* Pennant's Voyage to the Hebrides, p. 336.

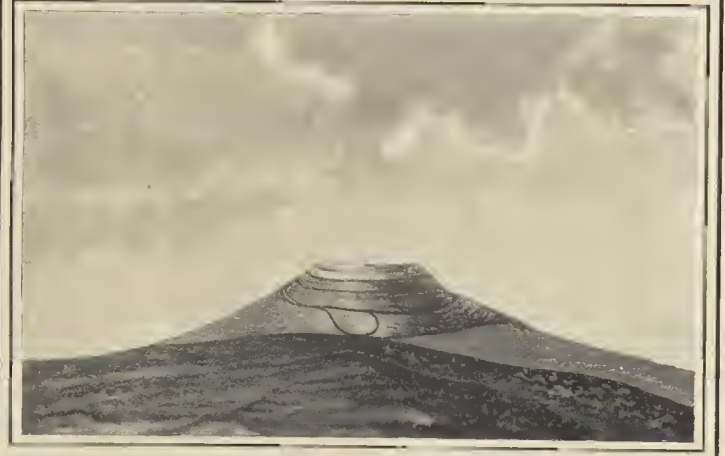
† Ibid. p. 95.

F1

PII



F2



*Views at a distance of
The Herefordshire Beacon, & the White Catterick.*



Another, hollowed out of a solid tree, and of the same kind, was seen in the same neighbourhood by Mr. Pennant, near Kilblain;* it was eight feet eight inches in length, and two feet in breadth, having a cavity of six feet seven inches in length, and of eleven inches in depth, the hollow of which had plainly been formed originally by means of fire, in the very same manner as the Indians of America formed their canoes: † so nearly are the first rude efforts of human industry almost unavoidably similar, even in very remote countries.

And as these two canoes bear testimony to the antiquity of the neighbouring fortress; so we are not without instances of cœval remains, supporting this sort of testimony, in the more southern parts of this island.

For besides others that might be mentioned; in the year 1720, there were several canoes, very similar to these, dug up in the marshes of the river Medway, above Maidstone; made of trees which were hollowed. And one of them was so perfectly preserved, as to be actually used for a boat some time after it was dug up. ‡

So on draining *Martine Meer*, || or Marton Lake, in Lancashire, a few years ago, there were found sunk at the bottom eight canoes; each made of a single tree; which there is every reason to believe were used by the antient Britons in fishing upon this lake; and which, in size and shape, were much like the American canoes.

Beverley's account of the method which the Indians of Virginia used for constructing these sort of vessels, is so curious, that I cannot omit to insert it: and the rather venture even to describe the whole process at large; because it flings great light upon another most singular circumstance, often observed with regard to our own peat grounds, and morasses: (viz.) that many of the old stumps, and bottoms of large trees found therein, appear to have been burnt down with fire. A circumstance which seems to indicate, that the trees themselves had been felled by the aboriginal inhabitants of

* Voyage to the Hebrides, p. 94. † See a faithful representation by Thomas Harriot, in De Brie's publication of his drawings. See also Beverley's History of Virginia.

‡ Description of England, Vol. V. p. 128.

|| Leigh, l. p. 18. Gough's Camden, Vol. III. p. 138.

this island, nearly in the very same manner as the trees by the Indians in Virginia.

“ They bring down a great tree, (says Beverley,*) by making
 “ a small fire round the root, and keeping the flame from running
 “ upward, until they burn away so much of the basis, that the least
 “ puff of wind throws it down. When it is prostrate, they burn
 “ it off to what length they would have it, and with their *stone*
 “ *tomahawks*, break off all the bark, which when the sap runs will
 “ easily strip, and at other times also will come off when well
 “ warmed by fire. When it is brought to a due length, they raise
 “ it upon a bed to a convenient height for their working, and then
 “ begin by gentle fires to hollow it, and with scrapers rake the
 “ trunk, and turn away the fire from one place to another, till they
 “ have deepened the belly of it to their desire: thus also they
 “ shape the ends, till they have made it a fit vessel for crossing the
 “ water; and this they call a canoe, one of which I have seen thirty
 “ feet long.”†

In Perthshire, in Scotland, in the division called Athol, in the parish of Mouline, on the top of a great eminence, are the remains of a vast enclosure; a stronghold, of the same nature with that in Glen-elig.‡ The form tends to an oval; the greatest length is three hundred and sixty-feet; and the breadth one hundred and twenty.

We now ought to mention some of those extraordinary fortresses, which from certain very striking circumstances in their appearance, have been supposed by Mr. Williams, and Mr. Anderson, who examined them very attentively, to have had their walls, or rather banks, *artificially vitrified*; but which Mr. Pennant, and Mr. Cordiner (who also saw them), concluded to be either remains of antient *volcanic* hills converted to this use; or at least to have had their valla,

* Hist. of Virginia, p. 198.

† It ought however to be remembered; that besides heavy ones, of timber, (which may be called *log-boats*;) the Britons had a still lighter kind of boat, made of osiers, and the flexible branches of trees, and covered with skins; which were still in use in Cæsar's time; who informs us, that he even transported an army over a river in Spain, in boats made in imitation of them. They were also, we are informed, so light, that they might easily be carried in carts. See Cæsar de Bello. Civ. lib. i. sect. 54. Plinii Hist. Nat. lib. vii. sect. 57. and lib. iv. cap. 16. sect. 30.

‡ Pennant's Tour in Scotland, Part II. p. 53.

or banks, constructed of the lava of *volcanos* collected from some adjacent parts.

Leaving the controversy to be supported by the ingenious dissertations that have been written to clear up this matter,* we may just remark; that even if the bank or vallum was actually vitrified, it required no great degree of civilization or skill, to melt down, amongst the stones of which the bank was composed, masses of that particular kind of earthy iron ore of a very vitrescible nature; which we are told much abounds in that neighbourhood, and through all the northern parts of Scotland.

“The fortresses of this kind,” Mr. Anderson says, “for the most part, surround a small area on the top of some steep conical hill of very difficult access.† One of the most remarkable of them, in particular, called *Knock-ferrel*, two miles west from Dingwal, in Ross-shire, is situated on the summit of a very steep and high hill, of a longish form, and therefore rising into a sort of ridge at top, long in proportion to its breadth. Hence, when it is viewed at a distance, opposite to either end, it appears of a perfect conical form, very beautiful in its proportions; but when it is seen on one side, one of the ends appears plainly to be much steeper than the other: and at that end where the declivity is the least steep is the access, by a narrow path, on which you may ascend to the top even on horseback. The fortress on this summit consists of a long elliptical area, of near an acre of ground, which is entirely level, except towards each end, where it declines and falls a little lower than in the middle; and where are the two entrances. The one defended by eight or more cross banks, extending about an hundred yards,” as Mr. Anderson apprehended; “the other, where the hill is steeper, defended only by two or three such banks, extending about twenty yards.‡ This area is surrounded entirely, except at the entrances, by a

* See the *Archæologia*, Vol. V. p. 255. Vol. VI. p. 88. And a pamphlet in octavo by Mr. John Williams, entitled, “An Account of some remarkable Antient Ruins lately discovered in the Highlands, and Northern Parts of Scotland. In a series of Letters. And Cordiner’s Antiquities of Scotland, p. 12, 13, 14, 49. And Pennant’s Tour in Scotland, Vol. II. p. 165.

† *Archæologia*, Vol. V. p. 255.

‡ *Ibid.* p. 256.

“ steep sloping bank or *vallum*, so exactly adapted to the form of
 “ the hill, as to stand on the very brink of a precipice all round :
 “ and to appear even a continuation of the steep slope of the hill.*
 “ On cutting through this bank, it appeared to be composed of rub-
 “ bish, and loose stones, and superincumbent earth, like any other
 “ mound ; but † on the outside sloping part, it was found to have
 “ a crust of about two feet in thickness, consisting of stones im-
 “ mersed among vitrified matter; some of the stones being half fused
 “ themselves, and the rest of them having evidently suffered a con-
 “ siderable heat. But the stones in the interior substance of the
 “ bank beneath this crust, and in the part next the inward area,
 “ did not seem to have been affected at all.

“ Such was the strange appearance of the construction of this
 “ vallum. In other respects it is exactly like that of other British
 “ fortresses : and,” as the ingenious author of this account ob-
 “ serves, “ composed of large loose stones; not merely for the sake
 “ of forming a steep vallum to prevent the approach of an enemy,
 “ but because (being on the brink of a precipitous steep), no
 “ weapon could well have been so destructive to an assailant, as a
 “ stone rolled down the hill.

“ In some other of these fortresses, the supposed vitrification was
 “ perceived to be on the inside.” ‡

Let us attend to a few plain facts, by way of elucidating this
 matter, if possible, a little more fully.

Strabo has told us, that the walls of British towns and fortresses,
 in the plain and Lowland parts of the country, were constructed of
 trees hewn down, and made to form a fence; || and if so, we may
 surely conclude, that even in the hills, wherever timber could with-
 out difficulty be obtained, trees were also made use of, at least in
 part, to construct the banks and fences round the summits of their
 strongholds. It is most probable, that trees and wood were at first
 laid in such *valla* or banks, to bind the stones and earth the more
 firmly together; and to enable the Britons, or Caledonians, to raise
 those banks the higher. And in that case nothing is more obvious,

* Archaeologia, p. 257.

† Ibid. p. 259.

‡ Ibid. Vol. VI. p. 58.

|| Strabo. lib. iv. p. 200.

than that such walls were capable of being set on fire by an enemy. And if they were once set on fire, and there should chance to have been any of the earthy iron ore of a vitrescible nature, with which the neighbouring country abounded (and which Mr. Anderson mentions), mixed with the stone and timber, though by mere accident, and only as a material ready at hand, the vitrified mass so much the object of attention *now*, would easily have been produced, without any design on the part of the original architects.

That other still more antient walls were actually of this sort of construction has been most judiciously taken notice of by Mr. Harmer; * who says moreover, that the building walls partly of stones, and partly of other materials, continues to be a practice in the East to this very day.

Even the magnificent and finished wall of the outer court of the Temple of Solomon, was built with three rows of hewed stones, and then a row of cedar beams: and so was the wall of the inner court.† And again; when the walls were rebuilt, after the captivity, it was with three rows of great stones, and a row of new timber. ‡

And from this sort of construction, with materials so mixed, in a much ruder manner, we may be able to account not only for vitrified remains, but also for what the prophet Amos says, concerning the *sending a fire on the wall of Gaza*; || and *kindling a fire in the wall of Rabbah*, § *in the day of battle, when their king should go into captivity*.

We have a remarkable instance, mentioned by Josephus, ** of a strong inner wall, built by the Jews, when *Masada* was besieged; which was constructed of rows of great beams laid cross and cross, in an artificial manner, with earth and rubbish flung in to fill up the cavities; this wall could not be affected by the battering ram, which had destroyed the outward one. Flavius Silva, the Roman general, therefore, found no other means of destroying it but by fire; which at last accomplished its ruin. And had any of the earth and materials thrown in consisted at all of such sort of clay as has been just mentioned, there cannot be a doubt but that the ruins of

* In his Observations on divers passages of Scripture, Vol. III. p. 93, 94.

† 1 Kings, ch. vii. ver. 11, 12. ‡ Ezra, ch. vi. ver. 4. || Amos, ch. i. ver. 7.

§ Ibid. ver. 14, 15.

** De Bello Jud. lib. vii. cap. 8. sec. 2. 5.

this wall would have formed a *vitriſied bank*, exactly of the ſame kind with the vitriſied walls we have been deſcribing.

Theſe facts therefore may very plainly account, at leaſt in a degree, for the *vitriſied walls* of ſome of the old Caledonian ſtrongholds, which in other reſpects ſo nearly reſembled the ſtrongholds in Wales, and other hilly parts of this iſland.

And we may the rather attribute the appearance to ſome ſuch cauſe; when we conſider, that the firſt and moſt antient walls of the *Acropolis* at *Athens*, were merely of wood; as appears from the miſapprehenſion of the oracle in the time of *Xerxes*.*

And that, in later ages, there is every reaſon to believe, ſome of the antient Welch caſtles had alſo walls merely of wood. †

It remains only to be added, that two more of theſe vitriſied fortifications are to be ſeen in Galloway. ‡

To proceed then with the conſideration of other British fortreſſes in our own country.

Warton Cragg, in Lancaſhire, may juſtly be deemed another British ſtronghold. It is fully deſcribed by Mr. Hutchinson, in the *Archaeologia*; where is alſo a representation of it. ||

This fortreſs is on a lofty conical eminence, terminating obtuſely; in height near one thouſand feet above the level of the ſea; in the bay called by Ptolemy the Bay of Morecamb. The aſcent from the north is gradual, by a ridge of land; on every other ſide the cliffs are rugged, and almoſt perpendicular; ſo that the ſummit of the hill is unſailable but from the northern quarter. The crown of the hill forms a plain upwards of two hundred paces in diameter, of a circular form. In order to improve this natural ſtronghold, and indeed to render it impregnable, the Britons erected three walls: the firſt, or uppermoſt wall, runs from the brink of the cliffs, on the ſouth-eaſt point, where the eminence begins to ſlope to the northward, along the edge of the plain, forming an extenſive area, almoſt circular; the cliffs comprehending three hundred paces, and the wall three hundred and thirty-fix paces. The ruins of this wall fill ten paces in width, and where the facings of both ſides of the wall

* Herodotus Weſſelingii ed. lib. 7, 142. p. 568.

† See Pennant's *Tour in Wales*, p. 377, 378.

‡ See *Archaeologia*, Vol. X. p. 147.

§ See an account of them in the

|| Vol. IX. Pl. XV. p. 212, 213.

are discovered, it shews ten feet in thickness. There are two openings in this wall about six paces wide, and nearly at equal distances, dividing the three hundred and thirty-six paces of the wall into three portions. No mortar has been used in this or any of the walls of the fortress. The surface of the area is rugged, and in most parts rocky. Near the north-east gate, or opening, is a large circular cavity, about twenty paces diameter, which seems to have been designed as a reservoir for water. From the uppermost circumvallation, at the distance of twenty paces, a second wall commences, at the edges of the inferior cliffs and precipices, and runs parallel with the former wall. The ruins of this wall are considerably less than the other. There are two gates, or openings, in the second wall, not opposite to those of the inner one, but inclining more to the north and west. At the distance of forty paces, is a third or outward wall, also commencing at the edges of the cliffs, and running parallel to the other walls. The ruins of this wall are not so immense as those of the uppermost, though they are much more considerable than those of the middle wall. In this outward wall there are three gates, or openings; one near the centre, commanding the ridge of the hill, by which the fortress was most accessible; and two side gates almost opposite to those in the uppermost wall. And not far from this outward vallum are scattered very many small tumuli of an oval figure. And as a still farther proof of the British origin of this fortress; in its neighbourhood, on a range of rocks a little way to the north-west of it, and much below its walls, are three rocking stones, placed in a right line, north and south, at equal distances, about forty feet asunder.

Another remarkable fortress that, both from its name, and form, may well be concluded to have been British, is *Old Oswestry*, or *Hen Ddinas*, or *Caer Ogyrfan*, in *Shropshire* (for it has all these appellations).

It is situated on an insulated eminence of an oblong form,* which has been fortified with much art. The top is an extensive area, containing fifteen acres, three roods, and eight perches of fertile ground, surrounded with two ramparts and fosses of great heights and depths. At a distance from these, at the foot of the hill, is another deep fosse

* Pennant's Tour in Wales, p. 258.

which surrounds the whole, and ends (as do the two others) at the two entrances; which are placed diagonally, opposite to each other. On the slope of the hill, on both sides of one entrance, are a range of deep oblong trenches, running transversely between the second ditch and another, which seems to be designed for their immediate protection; for the first extends no further than these trenches; the other to no great distance beyond them. Tradition says this place was the last retreat of the Britons.* And it is no small confirmation of its high antiquity, that a curious *circular* wooden shield† was dug up some years ago in its area. This shield was about eleven inches and two-thirds in diameter, bound round with iron, and covered with iron net work, and having the inside lined with three coats of leather, and furnished with an handle, or strap, to pass over the arm; as the outside had an *umbo* four inches long, terminating in a point from the centre.

As there are such strong reasons for concluding this last fortress in Shropshire to be British; so also there are sufficient grounds for believing that the high hill, which is seen near Warnford, in Hampshire,‡ with a fortification of this sort at the top, called *Old Winchester*, was indeed the very original British town, in this part, from whence the present city of Winchester derived its existence, and subsequent importance; just as Salisbury succeeded Old Sarum.

And there being at Warnford a most curious structure, manifestly of the highest antiquity of almost any remaining in this island, if we are to judge from the style of its architecture; we may even from thence also § deduce some additional proof of the still greater antiquity and importance of the pre-existing, and near adjoining stronghold.

The well known fortress also on Gogmagog hills, in Cambridge-shire, called Vandlebury, || I may venture to say was most undoubt-

* See Gough's Camden, Vol. II. p. 421; and a plan of Oswestry, Pl. XII. Fig. 11. p. 404. † This shield was engraved by the Society of Antiquaries in 1763. See *Vestusta Monumenta*, Vol. II. Pl. XX. Fig. 6, 7, 8, &c.

‡ Gough's Camden, Vol. I. p. 120.

§ This building is most accurately described by Mr. Wyndham, in the *Archæologia*, Vol. V. p. 357, where are views, and a plan of the whole.

|| Gough's Camden, Vol. II. p. 138.

edly British. It is triple trenched, with two ditches, rudely circular, two hundred and forty-six paces in diameter, formed just as the British manner was; and the Roman road passing by it, from the brow of the hill, seems to have been caused to pass this way merely on account of this aboriginal fortress.

So again a stronghold near Seadon, in Staffordshire, which is mentioned by Dr. Plott,* as situated upon the edge of Shropshire, at a place called Ape-wood Castle, seems most obviously to have been an antient British post. It stands, according to his description, on a very lofty round promontory, commanding a vast prospect; and having the whole steep ridge, between it and *Chapshill*, for a mile together, all along cut into ditches, or hollows in the ground. Dr. Plott himself was persuaded it was a British work; but as I never saw it, I cannot presume to form a decided opinion, although it would be an omission, on this occasion, not to make some mention of it.

And now I must add further, that notwithstanding the arguments adduced by Dr. Borlase, to prove those which lie calls *Hill Castles*, in Cornwall, to have been constructed by the Danes, I cannot but conclude some of them, in like manner, to have been decidedly British; as I am persuaded he himself would have done, if he had been acquainted with the many fortresses, of a construction exactly similar, in Wales, and in Scotland, and in some parts where the Danes had no access that we know of; and where at least they could have no leisure to rear works of such labour, which would have been to them of so little use, even according to Dr. Borlase's own method of reasoning.

And I do the rather remain most fully persuaded, that these *Hill Castles* were *British*:

First. Because they are so totally different from those others; which for the plainest and most satisfactory reasons,† Dr. Borlase saw clearly were truly Danish.

Secondly. Because he himself was convinced that the reasons usually assigned for these being Danish were very unsatisfactory.‡

* History of Staffordshire, p. 397.

† Borlase, 545, 546.

‡ Ibid. 548.

Thirdly. Because the original names of many of them are truly British.*

Fourthly. Because they are in a part of the island, to which the aboriginal Britons were driven to have recourse, in the same manner as they were driven for shelter at last into Wales; and we may be assured therefore that they not only *previously* knew of strong British posts and fortresses in this part, but would also afterwards render the whole country as strong as possible; which accounts for these hill strongholds being so many of them in sight of one another, in a continued chain; † just in the same manner as they are found to be both in Wales, ‡ and amongst the old Caledonians in Scotland.

Fifthly. Because they so exactly correspond with the description of British strongholds *on hills*, given by Tacitus; || to which also Cæsar originally remarked they had recourse, as well as to their woods. §

And sixthly. Because they so exactly resemble the British fortresses we have already been describing; and all those concerning which there cannot possibly remain the least doubt; and agree with them, even in the circumstance of the little circular foundations, and low walls for the British huts, being still remaining on some of them.

To elucidate these particulars, I shall beg leave to add the descriptions of two or three, almost in Dr. Borlase's own words.

On the top of an high hill, in the parish of Sancred, is a circular fortification, called *Caer-bran*,** consisting first of a deep ditch, fifteen feet wide, edged with stone, through which you pass to the first or outward *vallum*, which is of earth, fifteen feet high. Within this vallum, passing another large ditch, about fifteen yards wide, you come to a rude stone wall, which quite rounded the top of the hill, and seems to have been of considerable strength; though it now lies like a ridge of disorderly stones. The diameter of the whole is ninety paces, and in the centre of all is a little circle.

Castleandinas, in the parish of Ludgvan, in Cornwall, is another of these fortresses. It consisted of two stone walls, built one within the other, in a circular form, surrounding the area of the hill.

* Borlase, p. 349. † Ibid. p. 348. ‡ Pennant's Tour in Wales, p. 413.

|| Annalium, lib. xii. cap. 33. § De Bello Gallico, lib. v. sec. 11.

** Antiquities of Cornwall, p. 346. Pl. XXIX. Fig 2.

The ruins are now fallen on each side the walls, and shew the work to have been of great height and thickness; there was also a third and outmost wall, built more than half way round. Within the walls are many little enclosures, *of a circular form*, about seven yards diameter, with little walls round them, of two and three feet high; which appear plainly to have been huts, and habitations. The diameter of the area of the fort, from east to west, is four hundred feet; and the principal *graff*, or ditch, is sixty feet wide. Towards the south the sides of this mountain are marked by two large green paths, about ten feet wide, which have been visibly cleansed by art of their natural roughness, for the more convenient approach to this garrison. Near the middle of its area is a well, almost choaked with its own ruins; and at a little distance, a narrow pit, its sides walled round; probably dug for water also, but now filled with rubbish.

This fortress is on the highest hill in the hundred of Penwith; and as to construction does not materially differ from *Caer-bran*. And surely every one who compares the account of it, given by *Borlase*,* with that which has been previously inserted of the *Herefordshire Beacon*, must perceive that they were both clearly of the same kind of construction.

Further; on the top of *Bartine hill*, in the parish of *St. Just*, in *Cornwall*, may be seen a circular mound of earth, but with little or no ditch; and which perhaps was never finished.† But yet, within this enclosure was sunk a well, now filled up; and near the centre, are three small circles, edged with stones pitched on end, and contiguous to each other; the northernmost nine yards in diameter, the others seven.‡

The celebrated work also, called *Maiden Castle*, in *Dorsetshire*, although commonly supposed to be Roman,|| yet there is the strongest reason to believe was originally British. For it is not easily to be imagined, that the Romans would have been at the inconceivable labour of erecting mud walls of so astonishing a magnitude, in such a spot, when they were so well acquainted with the great prefer-

* *Antiquities of Cornwall*, p. 347. † *Ibid.* p. 346. ‡ *Ibid.* Pl. XXIX. Fig. 1.

|| See a representation of it in *Gough's Additions to Camden*, Vol. I. p. 50.

ence of stone ramparts, used by them in so many other places. And it is no less unaccountable, that they should, contrary to their usual mode, prefer such a barbarous and irregular form. Neither can any satisfactory reason be assigned, why no Roman bricks, or coins have ever been found here, when so many are found at Maumbury, a much inferior work, near Dorchester.

To which I may add, that here also, near the south entrance, has been found the mouth of a cavern; a peculiarity that coincides with some *aboriginal hill fortresses*, but not with any of those of the Romans. And indeed, the manner in which the whole interior part is divided as it were into two camps; by a ditch and vallum running across; (whilst each camp has its proper entry, with perplexed banks, and ditches, like those at Old Sarum); corresponds much more nearly to the different spaces contrived, for the cattle of the country, and for the armed men, on the Herefordshire Beacon; and on the *Catterthun*: and on some other British fortresses; than with the separation of a Roman prætorium from the rest of a Roman camp; which subdivision we always find was made by them in a very different manner.

From these circumstances therefore, together with the near adjoining situation of a vast number of tumuli, and barrows, reaching for near ten miles, and very different from any works of the Romans, we may conclude Maiden Castle to have been a British fortress.*

The appearance of its ditches;+ its entrances somewhat resembling those at Old Sarum; and every thing about it, are British. And the *Via Iceniana* running within a mile of it, only shews that such a strong and original British post determined the Romans to bring a road this way. They might also, indeed, when conquerors, find it not inconvenient for a military post; and might therefore make some use of it, as they doubtless did of several other British fortresses: but how unlike was the whole of the construction here, to that at Richborough? which latter must have been one of their first establishments on this island; and which gives us decidedly their general plan.

And whilst we are enumerating these remarkable British remains,

* See some investigation of this matter in the Gentleman's Magazine for 1787, p. 754.

+ See a plan of it in Gough's Camden, Vol. I. p. 50. Pl. II.

we cannot but recollect *that called Maiden Bower*, not far from Dunstable; although it was a place of much inferior strength to many of those already mentioned. It consists of a large circular area of about nine acres, on the very summit of the chalk hills. Camden* very justly observes, that it is a round military fortification, such as Strabo has told us the British towns were. The vallum or bank is from eight to fourteen feet high, and to the south and east it has no ditch. On the north-west side is the descent to the meadows. The barrows in the neighbourhood of Dunstable confirm the reality of its British origin; and there can be very little doubt, but that this fortress was afterwards the very place called *Magintum* by the Emperor Antoninus, in his Itinerary, from whence at last Dunstable derived its existence, on an adjacent spot, in the reign of Henry I.

Besides all these fortresses, which remain in a state so little altered, we find others that were as unquestionably British; where yet, in later ages, either buildings of stone have been erected, or the names have been changed.

Amongst these, *Craig y Dinas*, in Merionethshire, deserves notice. There we find upon an high summit of an hill, surrounded with a vast heap of stones, the ruins of a wall, which in many parts retains a regular and even facing. One of those kinds which were the first deviations from the quite rude ramparts of loose stones; and prior to the improvement of masonry by the use of mortar. And here we also find an oblique artificial entrance, with stone facings on both sides; and near this entrance two ramparts of stone.†

And amongst these also may be classed *Billington Bury*; on which the antient castle of Stafford is supposed to have been situated:‡ and *Castle-hill*, on the verge of *Cank heath*, in the same county, which Mr. Pennant justly concludes (contrary to Dr. Plott's idea) to have been a work much more antient than the time of King Canute.¶

Hunsborough Hill also, in Northamptonshire, may fairly be allowed (contrary to the received opinion), to have been a British

* Gibson's Camden, p. 290. Gough's edition, Vol. I. p. 325, 331.

† See Pennant's *Tour in Wales, and Journey to Snowdon*, p. 109.

‡ See his *Journey from Chester*, p. 77.

¶ Ibid. p. 97, 98.

post, and not a Danish work of the beginning of the tenth century, or about 921. For it is hardly probable that the Danes (who were in possession of Northampton in 917) would raise such a kind of work so near their much stronger quarters.*

So I must add Mowslow Castle, on the top of a very high hill, in the parish of Glossop, in the county of Derby, appears much rather to have been originally a British, than a Saxon fortress; notwithstanding its present name may seem to be derived from a name given it in Saxon times: and though it may have been surrounded with a wall. † Its figure shews it plainly to have been originally a British fortress. It is on a lofty summit; and consists of an area of several acres, encompassed by three large ditches. The ascent is on the south-west side, where the slope is easiest; and there the strongest works, or banks, were raised. On all other parts the hill is exceedingly steep.

Caergwre also, on the summit of a great rock, in the parish of Hope, in Flintshire; notwithstanding it had afterwards a round tower built upon it, and deep fosses, cut through the rock itself; has round its verge the vestiges of a rampart of earth, and stones, and a fosse of such a kind as was usual in the British posts. ‡

But one of the most remarkable is a rock called *Delwin* or *Inch-stuthel*, in the great plain of Stormont, a part of Strathmore, in Scotland.

It seems to have been possessed successively, by the antient Caledonians, or original British people; by the Picts; by the Romans; and by the Scots, from age to age; having now at last a modern mansion upon it. ||

The situation of this house is of strange singularity; on a flat of a hundred and fifty-four Scotch acres; regularly steep on every side, and in every part of equal height; that is, about sixty feet above the great plain of Stormont, in which it stands. On this elevated flat we find vestiges of just such a dike, as the most antient uncivilized people used by way of fortification; a mound of stones

* Journey to Chester, p. 323.

† Archaeologia, Vol. V. p. 89.

‡ Tour in Wales, p. 404.

|| It is not a great way either from Dunkeld, or Perth. In Mr. Pennant's Tour in Scotland, Part II. p. 67, is a plan of the whole.

and earth running all round the margin of the steep in every part; and remaining in many places entire; although rendered less visible in others. The stones of which it is composed, appear not to have been found upon the spot; but to have been brought from a place two miles distant, where quarries of the same kind are now to be met with.

In a part of this strange elevated plain of rock, where it begins to grow narrow at one corner, a dike crosses the ground from margin to margin. This seems to have been a sort of outwork against an enemy; and within this, nearer the precipice, at the corner, a portion has been cut off for the original stronghold; defended by five great dikes, and as many deep fosses. Here not only the Caledonians, but the Picts afterwards, and then the first Scots, unquestionably defended themselves; and on the remaining larger part of this extraordinary insulated rock, even the Romans formed a square camp; of which there are some remains.* *Delvin* seems also formerly to have had a further security, of which time hath divested it; for there is every reason to believe, both from the antient name, *Inch-stuthel* (or *the isle of Tuthel*), and from several appearances, that the river *Tay* once entirely environed this insulated elevation. In the plain of Stormont, near adjoining, are several small barrows; an additional proof surely, if such were wanted, of the great antiquity of this fortress.

Such as we have been describing are the remains of the first rude efforts of human industry; urged on, by fear and necessity, to form munitions, in this country, against wild beasts, and against as savage men. Munitions whose natural strength and firmness was so great, that the caution, skill, and experience of Paulinus, of Agricola, and of other Roman commanders, soon taught them not to attack, unnecessarily, these *dernier resorts*; these nearly inaccessible strongholds.

We read in antient annals, however, of fierce attempts in other regions; where, before such consummate and dear bought experience took place, these aboriginal strongholds were attacked and

* Particular notice has been taken of this, since these sheets were written, by General Roy (in his *Military Antiquities*, p. 75); who perceiving strong remains of Roman works, of a subsequent age, seems too much to have lost sight of the nature of the original stronghold.

stormed, with great loss; and, unless by surprise, to very little purpose. We shall have occasion to mention some of these adventures. But before we quit the notice of British forecast and caution, it may not be amiss just to mention, as a matter of some little additional curiosity; that from certain remains still existing, they seem also to have devised some other means of more ordinary refuge, than these great strongholds just described: and also hiding places for their stores; as other nations on the Continent did, in a similar manner, long before them.

For there are certain subterraneous rude pits and caverns still remaining, in different parts of this island, which so nearly resemble those mentioned by Tacitus, as being frequently made by the Germans, that it is almost impossible to avoid concluding that they were formed for the same purposes, by the first colonizers of this country.

Tacitus tells us,* “that the Germans were accustomed to dig “subterraneous caverns, and then to cover them over above with “much loose earth (or compost); forming hereby a refuge from “storm, and a receptacle for corn; because by means of such sort of “places they resist the frost. And besides, if at any time an enemy “comes; the open country is plundered, but these concealed and “deep sunk dens, are either unknown, or deceive the plunderers, even “by that very circumstance, that they are places to be hunted after.”

So Hirtius tells us, † “it was the custom of the inhabitants (of “that part of Africa which we now call the Barbary coast) to have “in their fields, and *in almost all their towns*, caves under ground, “for the sake of hiding their corn privately; and that they prepared these principally on account of wars, and the sudden invasion of their enemies; which circumstance being discovered “to Cæsar, he obtained from *thence* a great quantity of grain.”

Numbers of such subterraneous magazines Dr. Shaw met with, even still continued in use, in that very country. ‡ And Dr. Russell tells us, that in Syria he met with the same sort of repositories:

* Solent et subterraneos specus aperire, eosque multo insuper fimo onerant, suffugium hiemi, et receptaculum frugibus: quia rigorem frigorum ejusmodi locis molliunt: et si quando hostis advenit, aperta populatur; abdita autem et defossa, aut ignorantur, aut eo ipso fallunt, quod quaerenda sunt. De Moribus Germaniæ, c. 16.

† Hirt. de Bello Africano, sect. 57.

‡ Shaw's Travels, p. 139.

for near Aleppo, he says,* their granaries are even at this day subterraneous grottos, the entry to which is by a small hole, or opening, like a well.

And in like manner Le Bruyn assures us, † that near Rama, in Syria, he met with many pits, and wells, which he was told had served to keep corn and grain; and by means of throwing down stones, he discovered that they were very deep.

Mr. Harmer, ‡ in his most useful and excellent observations on Scriptural history, very judiciously applies some of these descriptions to the illustration of that remarkable passage in Jeremiah, § where ten men are said to have preserved their lives from slaughter by discovering their treasures to Ishmael, saying, “*slay us not; for we have treasures in the field, of wheat, and of barley, and of oil, and of honey. So he forbore, and slew them not among their brethren.*” On which occasion I must also add, that the bodies of the seventy men that were slain by *Ishmael*, are said to have been flung into a pit, which Asa, the King of Judah, had made for fear of Baasha, King of Israel.

The same most intelligent annotator, Mr. Harmer, also makes use of a very curious account of a circumstance that happened so late as the time of the Croisades; and that serves to explain the manner in which people, in the most antient times, hid themselves, and their effects, for fear of an enemy. ¶

“When Baldwin I.** invaded the country near Ascalon in Syria, he found villages, whose inhabitants having left their houses, had retired with their wives, and children, their flocks, and herds, into subterraneous caves. And upon hearing this, he ordered fires to be kindled at the mouths of those caves, that they might be forced to surrender; which having effected, he ordered a hundred of them to be beheaded; because they had been formerly a great annoyance to travellers, rendering the roads dangerous; and he seized on the provisions, they had lain in for themselves, and the cattle with them.”

* Russell's History of Aleppo, p. 18.

‡ Harmer's Observations, Vol. II. p. 452.

§ Harmer's Observations, Vol. III. p. 61.

† Le Bruyn's Travels, Vol. II. p. 149.

|| Jeremiah, ch. xli. ver. 8, 9.

** Gesta Dei per Francos, p. 781.

Nor ought we, whilst mentioning these caves, and hiding places, to omit recollecting what Tavernier relates,* concerning the country between the ancient *Nineveh*, and *Ispahan*, in Persia; not far from the famous plain of *Arbela*. That amongst the mountains, even an entire town, called *Cherazoul*, is found, formed of a number of caverns; which there is reason to believe were originally made only as places of retreat, to defend the inhabitants of the frontier against the Arabs of Mesopotamia.

They are cut out of the face of a precipitous rock, he says, for the extent of a quarter of a league; and each habitation consists of a cave, whose mouth is stopped by rolling a great stone, like a sort of mill-stone, into it; where the sides of the door-way are so cut, as to receive it exactly; in such a manner that the surface of the stone becomes level with the rock. By which means we may perceive, that it might be thrust out by those within, but could not well be pulled out, without proper instruments, by any persons on the outside. Tavernier adds also, that (au dessus) above these habitations, there are caves dug out, where the inhabitants secured their cattle.

And we have a proof of the construction and use of pits for securing corn in Hungary; where necessity has caused the custom to be preserved much longer. Dr. Brown says,† that in Upper Hungary, they use not barns or stacks of corn; but have many deep and large caves under ground, wherein they lay it up safe, both from robbers, and from sudden incursion of enemies. At *Clesch* near *Toopolchan*, when the Turks and Tartars, in late wars, made their inroads, the people retired and hid themselves in such cavities; but some Turks, speaking Sclavonian, told them that the coast was clear, and the enemy gone, and so tempted them out of their holes; whereby they were unfortunately deceived into captivity, and carried away into remote countries, never to be heard of again.

So in Mingrelia, on the borders of the Euxine, which was formerly connected with Media, Chardin informs us‡ that they secure their grain and forage in deep pits, which they cover so nicely, that there is no appearance of the earth having ever been removed.

* Voyages de Tavernier, Tom. I. p. 193.

† Brown's Travels, p. 12.

‡ Tom. I. p. 38. ed. 1711.

And he says, he has seen pits of this kind which have served from generation to generation, without any damp or moisture having penetrated into them ; and without being subject to any bad smell.

All these accounts uniformly shew, what recourse mankind in general, in an uncivilized state, in different countries, and especially in those which were first of all inhabited, had to these kind of hiding places, for security ; as well as to strongholds, on rocks, and hills. It may therefore very reasonably be conceived, that the primæval inhabitants of this island, would not be without such rude resources : and accordingly we find *remains* that answer most precisely to such sort of hiding places.

For, as to those for corn and grain, there is one that can hardly be mistaken ; although such strange conclusions have been drawn by some writers with regard to it ; and even by one who judged so excellently well in other matters.

It is at Royston, in Hertfordshire ; most manifestly quite unconnected with the foundation of the present town ; and prior to the existence of any place of that denomination : for it was discovered, at last, only by means of an endeavour to put down a post in the market-place, in 1742.

A very imperfect sketch of it, taken from Dr. Stukeley's drawing, may be seen in Mr. Gough's Additions to Camden's Britannia,* but it is in reality of a much more conical form than there represented. The descent to it is by a narrow pipe or well, just like those in Syria. And as to the figures, and odd holes cut in the sides, in the chalk, they are clearly the rude carvings of idle persons, who have been down there at different times ; and afford no rational ground for any conjectures, like those of Dr. Stukeley, concerning a Lady Roisia, or its having been her oratory. Its situation, in a country full of British barrows ; and in a spot of such note in early ages, that two Roman roads were made to meet there ; as well as the whole appearance of the place, speak it to have been a most antient repository for grain ; and sometimes even a secret hiding place for persons, against irruptions of enemies, of that violent and sudden kind so frequent in early ages.

Of the same sort of structure also ; and (as seems most plainly to

* Vol. I. p. 341.

appear from their whole form) designed for the same use, are those numerous pits near Crayford, in Kent; described by Mr. Hasted.* There are now to be seen, he says, as well on the heaths near Crayford, as in the fields and woods hereabout, many artificial caves in the earth; some of which are ten, some fifteen, and others twenty fathoms deep. At the mouth and thence downward, they are narrow, like the tunnel or passage of a well, but at the bottom they are large and of great compass, insomuch that some of them have several rooms, one within another, strongly vaulted, and supported with pillars of chalk. Mr. Hasted apprehended them to have been made by the *Saxons*, in imitation of the custom of their German ancestors, as described by Tacitus; but if we consider how much superior the other Saxon modes of fortification appear, it seems much more reasonable to conclude that they were *first* formed by the *Britons*, in conformity to the most antient usages of mankind.

There are several more of these kind of hiding pits, and of the like peculiar structure, near Faversham, in the same county.†

And of this kind seem to have been the pits mentioned by Camden, near Tilbury in Essex.‡

That they were all really the works of the Britons, may be concluded; because Diodorus Siculus expressly tells us, that the Britons did lay up their corn in *subterranean repositories*:|| from whence the antient people used to take a certain portion every day; and having dried and bruised the grains, made a kind of food thereof for immediate use.

Nor is it unworthy our notice, that this sort of diet, and also the quick mode of preparing it, greatly resembles what we read of, as being still in use, in some of the most uncivilized of the Western Islands of Scotland;§ and in some parts of the Highlands; amongst the descendants of the old British Caledonians. For there sometimes, to this very day, a woman taking an handful of ears of corn, and holding them by the stalks in her left hand, sets fire to the ears; and then with a stick in her right hand, beats off the parched grain, very dexterously, at the very instant when the husk is quite burnt;

* History of Kent, Vol. I. p. 211. † Ibid. Vol. II. p. 717. ‡ Gough's Camden, Vol. II. p. 41.

|| Diodorus Siculus, lib. v. 209. p. 347. ed. Wesselingii.

§ See Martin's Description of the Western Isles, p. 204.

by which means a quantity of corn is winnowed, ground, and baked, within an hour.

And in the very islands, where this usage and mode of dressing corn has continued so long, are also still visible remains of hiding pits. Amongst which, none are more remarkable than those called *the antient hiding holes in the island of Ilay*, one of the Hebrides; which have been used even down to very recent times, by the barbarous inhabitants, both for hiding of stores, and for secreting their own persons.

They are thus described by our most useful peregrinator, Mr. Pennant.* Speaking of *Down-vollan* he says, “in various parts of this neighbourhood are scattered small holes, formed in the ground, large enough to hold a single man in a sitting posture: the top is covered with a broad stone, and that with earth; in these, unhappy fugitives took shelter after a defeat; and drawing together sods, found a temporary concealment from enemies, who in early times knew not the giving or receiving of quarter. The incursions of barbarians were always short; so that the fugitives could easily subsist in their earths till the danger was over: men were then almost in (what is called) a state of nature:—how strong was their resemblance to beasts of prey!”

Together with these very odd and slight hiding places described by Mr. Pennant, ought to be mentioned those which are to be met with in several parts of England; some of which have been strangely mistaken by Dr. Stukeley, and called *inverted barrows*: whilst others have been no less strangely mistaken by natural historians, and called swallow pits; or have even been supposed to have been occasioned merely accidentally by the falling in of the earth, over caverns, either natural, or artificial.

That some pits which were indeed originally natural swallows, or inlets of water; and that others, where mines or caverns have permitted the superincumbent earth to fall in, have a very similar appearance, is unquestionable: but there is one strange circumstance, that in a most decided manner distinguishes those *conical deep pits* just mentioned from all the others; and shews that they were really artificially formed; and carefully designed for the purpose of being

* Voyages to the Hebrides, p. 224.

hiding places. And that is; that to this very hour, although they be in spots where neighbouring cavities, much more shallow, will form little pools of water after rain; and others form even standing pits of water of no small depth; yet these will hold no water at all, and are always dry: being so contrived, with most manifest design, as just to reach down either to sand, or gravel, where the water will always run off directly. Whilst yet they cannot be conceived to have been mere natural outlets, or swallow pits; because they are usually on high grounds, and even on the summits of hills, where no descent, or final exit of any flood of waters could have been, even in the time of a general deluge; because such waters must have departed towards the adjoining vallies. To which it may be added, that their magnitude is by no means sufficient to have answered any such great, natural purpose.

As a farther proof of their original use, it is to be observed, that they are almost uniformly found on such hills as have on their summits a great extent of plain ground, and heath.

Of this kind are some very curious pits, on the top of the Combe Hills, not far from Croydon, in Surrey. They are of a conical form, and most manifestly have been constructed with great care, and much rude art; so as to preserve their figure like the barrows, and mounds, and other works of the Britons to this very hour. I measured one of the most perfect of them very exactly; and found it to be, in every direction, almost precisely fifty-five feet in diameter at the top, and thirty, or thirty-one feet in depth. At the bottom it has a flat area, nine or ten feet in diameter; where, on account of the sloping sides, and wide extended mouth above, thirty or forty men might either stand, or repose themselves, with the utmost ease and convenience; whilst it would be utterly impossible for any enemies, or marauders, traversing the great plain above, either to see them, or to discover the place of their concealment, till quite near the very edge of the pit. Even parties of horse could hardly discover the place at all more easily than roving bands of foot soldiers; for at this very time, an incautious traveller, or sportsman, may frequently be in great danger of falling in, before he is aware. And any person having seen it once, would be at a great loss to find it again, were it not for a foot path that has now been

purposely made. When I visited this curious pit, it was after many days of heavy rain: nevertheless the bottom was as perfectly dry, as the clearest part of the heath above; and the ascent up and down the sides was neither very dangerous or difficult, though steep and slippery. The air at bottom was clear and refreshing, and there was a perfect shelter from the wind. It appeared also most obvious, that provisions, and moveables, and other treasure, might be placed at the bottom, under the feet of those who should be concealed, without being liable to any more damage, than in any other part of the country in open air.

That these pits, therefore, were designed by the antient Britons for this very purpose, during times of hostile invasion, is most highly probable: and the rather, because there has been a constant tradition preserved, in the adjacent country, that there was a *British town* in the neighbourhood, at Addington; whilst as a confirmation of the truth of this tradition, it may be observed, that there are still existing, in the neighbourhood of these pits, on the brow of an hill, many small barrows, or tumuli, evidently British.

Nothing could be finer than the situation here chosen; for the view from the plain above is one of the richest that this country affords: and the remains of several exceeding antient stumps of trees, plainly shew, that notwithstanding the bleak appearance of the summit of these hills at present, yet that the spot was capable of producing timber; and was probably covered with wood originally, in the very manner by means of which British towns were usually secured.

Besides the one most perfect pit that I have just described; there are three others still remaining almost entire; situated a little further to the south or south-west; and nearer to the barrows, and to a most remarkable brow of these hills, which has greatly the resemblance of an head land at sea. And one of these is larger than that which has been described.

Near these pits, although they are themselves so dry, there is a fine continual spring of water bursting out, and running from thence down into the distant valley; sufficient for the supply of a great number of persons.*

* These pits were pointed out to me by John Claxton, Esq. of Shirley, who has been long resident in the neighbourhood.

Of a similar kind to the pits just described, are some conical pits on the extended plain of Moushold hill in Norfolk; not far from the very antient city of Norwich. And some others, on the great plain, not far from the road to Winchester.

There are some very remarkable pits also of this kind, about three miles north-east from Piddletown, in Dorsetshire;* one of which is so wide, that a man cannot throw a stone over it. They are all, like those in Surrey, of a conical form; broad at top, and narrower at the bottom. And it has been observed, in like manner of them, that they never hold water in the wettest seasons. And there are also here, as in Surrey, some tumuli in the neighbourhood.

So also, on several parts of the South Downs, in Sussex,+ (on which again are found many barrows) there are pits of a similar kind and form: as also on the plains in the neighbourhood of Lewes, and Brightelmstone; all which appear manifestly to have been made by art, as the soil is firm and chalky.

There are also several others that might be enumerated, on elevated downs, in different parts of England.

And besides these, must be added that *near Winster*, in the Peak of Derbyshire, there are two regular lines of pits, of a very similar sort; concerning which it is curious to observe, that although a part of an adjoining wood is very swampy; yet in these pits, after several days rain, no water is to be found. They are in a wood, called *Linda Spring* near *Crich*. They are in two lines; and about fifty in number. † And it has been well observed, that no ore, or stone, or clay, or coal, or any material is to be found in these pits, that could have been an inducement for digging them merely as pits. For the soil is entirely a dry kind of useless sandy gravel;—a sandy gravel which no *human* improvements in the neighbourhood could ever have found use for.

And particularly amongst these ought to be reckoned, those described by Leland, † on the Black Mountains, in Carnarthenshire, in Wales.

* See an account of them in the Gentleman's Magazine for 1768. Vol. XXXVIII. p. 109.

+ Ibid. p. 284.

‡ Archaeologia, Vol. X. p. 114, 116.

§ Itinerary, Vol. VIII. p. 119.

“ Ther be (he tells us),* a great number of pitts made with hand, large lyke a bowl at the heade, and narrow at the bottom, overgrown in the swart with fine grase; and be scatterid here and there, about the quartars where the heade of Kenner river is, that cummythe by Carie Kennen, and sume of these will receyve a hunderith men.”

Such also seem to have been those called the Pen pits, between Meere and Wincanton, in Somersetshire. † And perhaps, also those extraordinary excavations, in the rich vale of Whitehorse, near Little Coxwell, in Berkshire, ‡ described in the *Archaeologia*; which are called *Cole's Pits*, though no coal was ever found in the neighbourhood. But as these last are of a different form and structure; and many in number; and not regular in their shape and design; and are dug out of a stratum of sand; there is some room to conclude that they were possibly mere sand pits.

However that matter may be; it is undoubtedly true that excavations exactly of a similar kind to those on the Combe Hills, in Surrey, are often met with in various parts of this island; formed with such evident marks of design, that they might with much more propriety be called *inverted holds*; than (as Dr. Stukeley has denominated them) *inverted barrows*. They may very justly be deemed also to have served sometimes for the purpose of laying *ambuscades*, as well as for refuge. For their perfect concealment from the eye, till just upon them; and the very easy ascent from their bottom, by means of their sides sloping all round; appears admirably calculated for such an use.

There are, in like manner, some that may well have answered such an end, even on the summits of several hill fortresses.

Amongst which may be named the excavation found on the top of *Thetford Hill*, in Norfolk: a Fortress that has indeed generally been supposed, in conformity to popular opinion to have been Danish; but which there is much more reason to conclude must have been originally British, whatever use the Danes might make of it afterwards.

There are many pits for safeguard, and concealment, in various other parts; the enumeration of which would be too tedious. But before we quit entirely the consideration of artificial caves, it may

* Itinerary, Vol. VIII. p. 107 a. † *Archaeologia*, Vol. VII. p. 241. ‡ *Ibid.* p. 236.

be a considerable confirmation of all that has been said, to observe shortly, that such were common, in the early and barbarous ages, in Ireland; though of a different construction from most of those in England; being long concealed winding galleries, with recesses, under ground. One of these is particularly described in the *Louthiana*;* which was discovered under a ploughed field, near the river of Ballrichan; and seems to have been designed both for a granary to conceal corn, and for the security of other effects, in time of invasion. Many such are said to abound in that part of Ireland: and the Irish people have still a tradition, that they were all *sculking holes*.

We have some, of nearly a similar kind, also in Scotland; and particularly at *Hawthornden*, only seven miles from Edinburgh; which the tradition of that country (a tradition always deserving of some attention) still considers as the works of the Picts. Whensoever and by whomever they were made, they were unquestionably hiding places of the earliest ages, to secure both people, and effects, from the inroads of barbarous invaders.+ And as such they have obviously been connected with a strong, though small square tower, grafted as it were, ‡ on the native rock above, whose walls are of great thickness; and from the neighbourhood of which a pit, or well, is sunk, to let down effects and stores; that on account of the narrowness of the path of access, could be conveyed into them no other way.

The only entrance to these caverns, besides this pit, is on the precipitous side of a perpendicular rock, a great height above the river: where you first descend by twenty-seven steep and deep steps, cut in the rock; then pass a deep cleft, or gap, on a very narrow board, five feet in length; then ascend eight steps; and arrive at the mouth of the cave. Within the entrance of this, on the left hand side, cut in the rock, is a long narrow gallery, ascended by two steps more; which is seventy-five feet in length, and six

* Wright's *Louthiana*, B. III. p. 16. + Dr. Stukeley, who has given a plan of them in his *Itinerarium Curiosum*, fancied they formed a Pictish palace. Maitland, in his *History of Edinburgh*, ridicules this idea, but allows they were hiding caves.

‡ See the account in *Grose's Antiquities of Scotland*, Vol. I. p. 55.

in breadth: near the upper end of which is a narrow little apartment, like a dungeon, called the king's bedchamber. And on the right hand of the entrance is another cavern, cut in the rock, and descended into by two steps; which is of the length of twenty-one feet, and, like the other, of the breadth of six: into which cavern it is that a communication is made from above, by the sinking of a pit, or well.*

Fronting the entrance is another cavern; ninety-one feet long, and in the first part twelve feet wide; but in the further part only five feet eight inches wide, † and six feet high. And in a recess near the broader part is a well, some fathoms deep. In the side of the first gallery also is a small window, or hole, in the front of the rock, facing the bridge; which seems obviously designed for the double purpose both of taking in the narrow board which forms the bridge, and of defending the pass.

So strong has this hiding pit been found, that it was even made use of by the brave, and well known, Alexander Ramsay, so late as the year 1341. He resided here a considerable time; and had (as the historians tell us) many gallant men resort to him. ‡

And as there are so many remains of these strange hiding places, and safeguards, in pits and caves in this island; we in like manner find similar remains, in other countries that were more early inhabited: as for instance, in the island of Minorca; where we may be assured a Celtic people were established, even before it was possible for the Britons, and their Druids, to have made any of their settlements in Britain.

There are, says Armstrong, || great numbers of *caves* to be found in Minorca: which are either such as are natural and original; or such as have been made by the waves of the sea; or *such as were scooped out of the solid rock*, by the labour of the natives in very remote times.

These last are by far the most numerous, and are capable of containing all the inhabitants of the country upon occasion. They

* See Grose's Antiquities of Scotland, Vol. I. p. 55. † Pennant's Tour in Scotland, Part II. p. 254. ‡ Major. De Gestis Scotorum, lib. v. cap. xvi. p. 236.

|| In his History of Minorca, p. 223, &c.

differ little from those mentioned by Dr. Shaw, on the coast of Barbary: and some of them are even still actually inhabited by the poorest of the people. There is reason also to think, they served the natives as a retreat, for a long time *even in these later ages*, and as a place of security for their women and children, and the most precious of their moveables, on any extraordinary alarm; where they were safely concealed until the danger was over.

We learn, also, from Dameto's History of the Balearick kingdom, that the Moors, a little before their expulsion from *Majorca*, not only drew vast advantage from such kind of caves; but were enabled, by means of them, to make a noble defence against the victorious arms of their conqueror, and to cut off great numbers of his men, before they could be totally reduced.

Nor ought it to be forgotten, that we have the strongest proofs that the aboriginal caves, and hiding places, which had been made in Syria, and Palestine, by the antient kings of those regions, even in the days of Abraham, and of Joshua, were continued in use, from time to time, so late down as to the very last Jewish war.

For the account given by Josephus himself, of his own final retreat and concealment, just before he was taken prisoner by the Romans, puts the matter out of all question.

We find, in that account, that he was, with many others, concealed in a deep pit; which seems very nearly to have resembled those still remaining in our own country, at Royston, in Hertfordshire, and in some parts of Kent.

On the taking of Jotapata, he tells us,^{*} the Romans slew all the multitude that appeared openly. And on the following days they searched the *hiding places*, and fell upon those that were *underground*; and in the *caverns*. As for himself: as soon as the city was first taken, he withdrew from the enemy, even when he was in the midst of them, and leaped into *a certain deep pit, whereto there adjoined a large den AT ONE SIDE OF IT; which den could not be seen by those that were above ground.*† And here he met with forty persons of eminency, that had concealed themselves, with provisions enough to satisfy them for not a few days. Having remained here two days, on the third the place of his retreat was discovered by a woman:

* De Bello Jud. lib. iii. cap. 7. sec. 36.

† Ibid. lib. iii. cap. 8. sec. 1.

whereupon Vespasian immediately sent two tribunes to offer him security for his life, and to exhort him to come up; and upon his hesitating, the soldiery grew so angry, that they ran hastily *to set fire to the den*;* but the tribune would not permit them so to do. At the same time the Jews who were concealed with Josephus threatened to kill him, if he condescended to surrender; and the event was, that he found himself under a necessity of casting lots for life; submitting to their determination of destroying each other to the last man. Josephus had, as he tells us, by the good providence of God, on which he trusted, the success to have the last lot but one; and then prevailed on his fellow, who only was left with him, after the rest were slain, to submit to Vespasian; and was thereupon drawn up out of the pit, and saved alive.

This full account, which chances to have been preserved with such minute particulars down to our times, serves clearly to illustrate the nature of these caves; formed in the most antient times; continued so long in use in various countries; and imitated by almost all aboriginal people.

And whilst we refer to it, we ought also to remark, that in the very same places of his history, in which Josephus mentions the fortifying of *Mount Tabor* (a circumstance we shall have occasion to take notice of), he tells us of his fortifying this very *Cave of Jotaphata*; † and also the caves of Arbela, Bersobe, Selamin, Capharecho, and Sigo, and Japha. And ‡ that moreover he built walls about the caves near the lake of Gennesar; which places lay in the Lower Galilee: and the same he did to the places of the Upper Galilee.

He tells us also that *Simon*, the chief promoter of the last dire Jewish war, when he was making preparations for it, enlarged many caves, and found others ready for his purpose, at a valley called *Pharan*; and made use of them as repositories for his treasures, and receptacles for his prey; and therein laid up the fruits he had got by rapine. And that many of his partizans had their dwelling in them. ||

* This could be done only by combustibles flung down, with a view to suffocate those concealed therein, just as in another instance that will be mentioned in these Observations.

† Life of Josephus, sec. 57.

‡ De Bello Jud. lib. ii. cap. 20. sec. 6.

|| Ibid. lib. iv. cap. 9. sec. 4.

We are told besides this, that in the end of the war, the last hope which supported the seditious, was in their caves and caverns under ground: whither if they could once fly, they thought they should not be searched for.* And indeed, in some of these it was, that a part of the gold and treasures taken from the Temple, and that was at last delivered up to Titus, was for a time actually concealed. †

Both John and Simon also, the two head leaders of the seditious, resorted in the end to these sort of caverns; the first of whom was obliged to surrender, for want of food; and the other was taken prisoner, as he and his band were attempting to make their way out by mining. ‡

By the same most curious and venerable author, *Josephus*, who describes these subterraneous caves, we have also a no less interesting account of a kind of aerial caves, situated high up in the sides of precipitous rocks; that were equally used as places of security, and defence.

King Herod, he tells us, ¶ determined to make an expedition against the Idumean robbers, who lay in caves. Caves which were in the precipices of craggy mountains, and could not be come at on any side; since they had only some winding pathways, very narrow, whereby they got up to them: whilst the rock that lay in their front had beneath it vallies of a vast depth, and of an almost perpendicular declivity. But Herod let down the most hardy of his men (by ropes) in chests (from the top of the precipice above) and set them at the mouths of the dens; where they slew the robbers, and their families: and if any made resistance, they set fire upon them, and burnt them.

Amongst these Idumeans, a certain old man, the father of seven children, with their mother, desired leave to go out; and having obtained that leave, by the giving of the right hand, he ordered every one of his family to go out before him, while he stood at the cave's mouth. And on their so doing, he slew every son as he passed forth; and threw his body down the precipice. So also he did unto his wife. And then, last of all, he precipitated himself.

* De Bello Jud. lib. vi. cap. 7. sec. 3.

† Ibid. lib. vi. cap. 9. sec. 3 and 4.

‡ Ibid. lib. vii. cap. 2.

¶ Ibid. lib. i. cap. 16. sec. 4.

The form of these caves and hiding places, even in the very same countries in the East, was undoubtedly often different; as we find they were in our own country.

For whilst some, like that at Royston;* and those at Crayford in Kent, were descended into, by means of a pit or well; of which kind was that wherein Josephus himself took refuge; others again were mere conical excavations: and others were entered on a level, through the side of some hill; like those concerning which he says, that he fortified their entrances with walls.†

Of this latter kind seem to have been those caves of the antient Cornish Britons mentioned by Borlase.‡ One of which is thirty-six feet long, seven high, and four feet wide; having an interior cave branching off on one side, with a second recess even in that. Whilst another, called *Pendeen Vau*, consists of three caves, each about twenty-six, or twenty-eight feet long; the second being placed at the end of the first, and separated by a partition; and the third branching off on one side. The height of these caves being between five and six feet; but their breadth only four feet and an half, on account of their being covered with flat stones at the top. ||

And of this latter kind, also, seem plainly to have been some of those caves in this island, on the bleak desolate hills near Kildrumy castle, in the northern parts of Scotland, mentioned by Mr. Cor-diner; § which have their openings on the side of a mossy bank. “The entrance to them,” he says, “is but small; shewing only a long dark cavity within: but on going in he found the recess to be about eight feet wide, and six or seven feet high, well built up at the sides, and covered with vast flags. One may advance twelve or fifteen paces without interruption; and where the passage is blocked up, seems to be owing rather to rubbish having fallen in, than to the original design of the builders. The others

* It should perhaps just be mentioned, that since the cave at Royston was discovered, about forty years ago, another more easy entrance down to it has been made, with a sloping descent; besides the original perpendicular well: which may much mislead an incautious observer.

† De Bello Jud. lib. ii. cap. 20. sec. 6.

‡ Antiquities of Cornwall, p. 292.

|| There is a representation and plan of this cave in Borlase's Antiquities, Plate XXV. fig. 1, 2, 3.

§ Antiquities of Scotland, p. 15.

“are similar; but whether they have been connected together, and had communication at the ends, cannot now be easily discovered. They are said to have been numerous, and of great extent; and to have been the retreats of the antient possessors of the country, both from the inclemency of the weather occasionally, and from the fury of their enemies on invasions; and no doubt had occasionally the entrance blocked up with a large stone.”

In the Western Isles, also, in the skirts of the island of Skie, is a large cave in a rock, on the east side of *Portrie*, large enough for eighty persons; and having a well within it;* which circumstance, together with its situation, and narrow entry, rendered it an inaccessible fort. One man only can enter it at a time by the side of a rock; and having a staff in his hand would be able, with very little exertion, to cast over the rock as many as should attempt to come into the cave.

In the isle of *Arran*, again, in *Druim-Cruey*, is a cave in which an hundred men might very well be concealed. It is contracted gradually from the floor upwards to the roof. And at the upper end, on a large piece of rock formed like a pillar, there is engraven the figure of a deer, and underneath it that of a two-handed sword. There are also two holes cut out on each side the entrance, which they say served for holding large hewn trees, on which the cauldrons, or vessels, were hung for boiling venison, and provisions. And the natives affirm, that in this cave *Fin-Mac-Cowl* lodged, during the time of his residence in this isle; and that many of his soldiers occupied the lesser caves, near this large one.

And as a further proof that these kind of caves were spacious enough to be resorted to; and used in the manner above described; it may be remarked, that a cave, a little more to the south, on the same coast, has even been had recourse to, as a place of assembly, within a very few years: the parochial minister preaching therein sometimes, because of its being more central than the parish church.

Somewhat similar to *Fin-Mac-Cowl's* cave, seems to have been that remarkable den, not far from Penrith, in Cumberland, called

* Martin's Description of the Western Isles, p. 151.

+ Ibid, p. 219.

the Giant's Cave. The approach to which is by a narrow flight of steps, half way down a bold precipice hanging over the river *Eamont*. It* is about nine feet high, twenty wide at the entrance, and about fifty in length; and there were lately remaining strong indications of the entrance having formerly been well secured, even by gates: which seems to indicate that it was fortified in somewhat the same manner with those Caves spoken of by Josephus.

Besides the great hiding cave abovementioned, in the skirts of the island of *Skie*, there are also several little stone hovels, built under ground,† and called *earth-houses*; which served to hide a few people, and their goods, in time of war. The entry to them was on the sea side, or on the side of some river: and there is particularly one of them that deserves notice in the village of *Lachsay*; and another in *Camstinwag*.

Somewhat such, and even of smaller dimensions, have already been mentioned as existing in the island of *Ilay*.

Of the same sort, also, and designed for the same purposes, seem to have been some subterraneous apartments, cut out of the rock, not far from *Leith* in Scotland.‡

And with the bare naming of these, I should here end the account of these *hiding-places*; but that there is still one more sort, of so odd a kind, described by Mr. Pennant, as having been in use even down to our own times; that I shall just add the mention of it.

“He observed,” he says,|| “in the Highlands of Scotland, not far from *Invercauld*, among the rocks, a sort of *projecting shelf*; on which had been, a kind of hut, accessible only by the help of some thongs fastened by very expert climbers; to which the adjacent family got in time of danger in former days, with their most valuable moveables.”

These various instances tend to bring the history of all mankind, as it were, into one point of view: and to manifest how nearly the operations of human sagacity have resembled each other, though exerted in the most remote countries; whilst they were making their slow progression, from rude barbarism, towards civilization.

* See the description of it in the *Gentleman's Magazine* for 1791, p. 990.

† *Martin's Description of the Hebrides*, p. 154.

‡ *Pennant's Tour in Scotland*, Vol. I. p. 63. || *Ibid.* p. 116.

On viewing the caves and dens which once belonged to the Britons, it is impossible not to call to mind; that after the defeat of the Canaanites by Joshua, “*five of their kings fled, and hid themselves in a cave at Makkedah. And it was told Joshua, saying, the five kings are found hid in a cave at Makkedah. And Joshua said, ROLL GREAT STONES UPON THE MOUTH OF THE CAVE, and set men by it for to keep them in. And stay you not; but pursue after your enemies.*” Nor can we forget the sequel: that afterwards, when he returned from the slaughter, Joshua sent and brought them out of the cave, and caused his captains to set their feet upon the necks of these kings; and slew them; and afterwards cast their bodies into the cave where they had been hid; and laid great stones on the cave’s mouth.*

So again we cannot but recollect, that on first seeing Jonathan, and his armour-bearer, the Philistines said, “Behold the Hebrews come forth, *out of the holes,* † where they had hid themselves.

And in the mention so humbly made by Obadiah, many years afterwards, of his fear of God, and regard for his holy prophets, we find the same sort of hiding places referred to.

“Was it not told my lord, (said he) to Elijah, what I did when Jezebel slew the prophets of the Lord? how I hid an hundred men of the Lord’s prophets, *by fifty in a cave,* and fed them with bread and water?” ‡

Again, the same sort of places of security are mentioned poetically by Isaiah, || as hiding places in time of any dread or danger.

“They shall go into the holes of the rocks, and into the caves of the earth, for fear of the Lord, and for the glory of his majesty, when He ariseth to shake terribly the earth.”

And to return to what passed in the still earlier ages of the world; we read; that in the time of the judges of Israel; “because of the Midianites, § the children of Israel made them *the dens which are in the mountains;* and caves, and strongholds.”

And again, when the Israelites were terrified on the approach of the Philistines, “they did hide themselves** in caves, and in thickets, and in rocks, and in high places, and in pits.”

* Joshua, chap. x. ver. 16, 17, 18, 19,—22, 26, 27. † Samuel, chap. xiv. ver. 11.

‡ 1 Kings, chap. xviii. ver. 13. || Isaiah, chap. ii. ver. 19.

§ Judges, chap. vi. ver. 2. ** 1 Samuel, chap. xiii. ver. 6.

And it is very remarkable, that what our translation renders, in one place, *dens in the mountains*, and in another *thickets*, the Septuagint calls *μυρὸς*; that is, *places designed as a shelter for cattle*; exactly conformable to the account that has been given, both of the British strongholds on the tops of hills; and of those in woods, as mentioned by Cæsar.

Even so early as the days of Abraham, we find the remains of an army which had been beaten, flying to a mountain.*

And these sort of Fastnesses are spoken of, in the most sublime poetical language, by the prophets Jeremiah,† and Obadiah:‡ and as being the usual cities of the people of Edom; just as we find such were formerly the cities of the people in North Wales. To which we may add, that from the great number of cities said to have been in that small tract, the land of Og the king of Bashan,|| besides unwall'd towns; before the time of Joshua; we must conclude, those cities were only hill fortresses, and merely such sort of places of defence, as we have been describing. Places of defence, which yet are said to have *contained the cattle*; not only before they were taken by the Israelites; § but also to have contained, and secured the cattle of the Israelites themselves afterwards.

Nor is the description of them, *that they had high walls, gates, and bars*, at all inconsistent with this idea: because the high steep mounds, surrounding the areas of many of the British fortresses, on the summits of high hills, most certainly both were, and might very well be called *high walls*: and the entrances through these, there is every reason to believe, were in times of danger barricadoed with rude gates, and bars of timber.

We may therefore further conclude, the expression in the book of Deuteronomy, of the cities of the Canaanites being *fenced up to heaven*,** to have referred rather to those cities having been placed (as indeed Tabor, Bethuliah, Hebron, and Jebus, actually were), on the summits of high mountains, and rocks; than as referring to any extraordinary height of their artificial banks and walls.

* Genesis, chap. xiv. ver. 10. † Jeremiah, chap. xlix. ver. 16.

‡ Obadiah, ver. 3, 4. || Deuteronomy, chap. iii. ver. 4, 5.

§ Ibid. ver. 7, 19. ** Ibid. chap. ix. ver. 1.

The various sorts of fortresses we have been describing, are most exactly and curiously marked out by the words of the prophet Jeremiah;* threatening final destruction to the obstinately sinful, and disobedient Jews.

“ Behold, saith the Lord, I will send for many hunters; and they shall hunt them; from *every mountain*; and from *every hill*; and out of the *holes of the rocks*.”

So again in another place, we read, “ They that be in the *forts*, and in the + *caves*, shall die of the pestilence.” ‡

When Samson had made a great slaughter of the Philistines, we are told, he went and dwelt *in the top of the rock* Etam; || where we find, afterwards, three thousand men of Judah went up to confer with him. And Josephus says § it was *a strong rock of the tribe of Judah*. To which may be added; that from the words used by the Greek translators, in the Septuagint version of the book of Judges, it should seem as if there was also a *strong cave* in that place; rendering it similar to a retreat in another great rock in Syria, not far from Damascus. In which latter, the Emir Faccardine, a fierce Arab, in the beginning of the last century, with a small number of his officers, defied the whole Turkish army, for some months; ** till they were on the point of blowing up the rock.

Whether such kind of caves were, in any country, usual appendages to these sort of strongholds, on the summits of rocks, and hills, I will not pretend to determine: but it is not a little remark-

* Jeremiah, chap. xvi. ver. 16.

+ Ezekiel, chap. xxxiii. ver. 27.

‡ Whether the celebrated cave, called *Elden Hole*, in Derbyshire, is to be numbered amongst the Hiding Pits of the Britons, together with those at *Crayford*, and that at *Royston*, I will not pretend to determine: because it might possibly have had another use originally, as a mere mine for obtaining ore. But its whole form coincides so exactly with the form of those caves; and it so perfectly agrees with those described by Josephus; that I am now much inclined to class it with *Hiding Pits*: and shall leave it to the curious to determine: referring them either to the inspection of the whole themselves; or to the account I gave of it, in the Philosophical Transactions, Vol. LXI. p. 250, in consequence of the careful and accurate survey made of it by my friend Mr. Lloyd.

If it was really a British *Hiding Pit*; the having a well at its bottom, that went down to a river of fine fresh water, certainly gave it an advantage beyond most others.

|| Judges, chap. xv. ver. 8, 11.

§ Josephus's Antiquities of the Jews, B. v.

chap. 8. sec. 8.

** Harmer's Observations, Vol. II. p. 224.

able, that at a small distance from the very antient fortress I first described (the Herefordshire Beacon), and on the very same ridge of hill, there is a singular cave formed out of the rock on the brow of an exceeding steep part; it is about 12 feet deep in length; $7\frac{1}{2}$ feet wide; and $6\frac{1}{2}$ high: a place where one or two Britons, might for a long time have defied a great force, with the weapons then in use; and where a desperate man might even now make a considerable stand, considering the rapid declivity of the adjacent ground. Its situation is shewn very nearly by letter (*d*) Pl. I. fig. 1.

Just as Samson made his retreat to the rock Etam; so, when the greater part of the tribe of Benjamin were destroyed, by the fierce attack of the other tribes of Israel, endeavouring to obtain, in that violent manner, the execution of justice; those who escaped, to the number of six hundred, fled to the rock *Rimmon*,* in the wilderness; and abode in the rock *Rimmon* four months: which plainly shews, not only that this must have been an actual hill fortress, capable of containing all these men, with their tents, and cattle, and provisions; but also that it must have had a proper supply of water.

And to this observation concerning the rock *Rimmon*, it may be added, that whoever attends accurately to the descriptions of mount Tabor in Palæstine, and also of mount Bethaccerem, or Bethulia, as given by Poccocke, and Maundrell,† will hardly forbear comparing those places instantly, in his mind, with the antient British fortresses we have been describing. Whilst indeed, like them, they seem continually, from age to age, to have been appropriated to just the same kind of use.

When the land of Israel was invaded by the host of Jabin king of Canaan;‡ and it was determined, at last, in consequence of the exhortation of Deborah the prophetess, to make a stand against them; the people assembled, and went up for that purpose to the

* Judges, chap. xx. ver. 45, 47. Chap. xxi. ver. 13. This strange and barbarous manner of enforcing the execution of justice in those very antient days, cannot but remind one of the same kind of rude practice existing amongst the Clans of Scotland in very late ages; even long after the use of their hill fortresses was antiquated.

† Poccocke's Travels, Vol. II. p. 42, and 64.

‡ See the Book of Judges, chap. iv. ver. 12, 14.

top of mount Tabor. And we are informed, that Barak sallied forth, and went down from thence to the battle, with ten thousand men after him.

Again; when the army of Nebuchodonosor, king of Assyria, threatened the destruction of Judea; we are told expressly,* that the people of Israel possessed themselves beforehand *of all the tops of the high mountains, and fortified the villages that were in THEM, and laid up victuals for the provisions of war.* Which description would exactly suit what we may believe to have been the conduct and management of the antient Britons, either with regard to Tŕer Caeri, or Penmaen Mawr, or Dinas near Landudno, when invaded by foreigners; or threatened by neighbouring tribes.

And with regard to Bethulia, we have a singular narration; wherein we find that Holofernes, having been told that the Jews had fortified the tops+ of the high hills; and having examined Achior, one of his captains, who was an Ammonite, concerning their strength; was much displeas'd with the extraordinary account he gave; and did thereupon, in great wrath, and with much contempt, ‡ send him fast bound, to be deliver'd up to those in Bethulia; that he might abide there, till that fortress should be taken by the Assyrians; when he should be cruelly put to death. The soldiers, who carried him, found great difficulty || in devising to approach, because of the slings of the Israelites. They ventured however near enough to cast him down bound at the foot of the hill; and thereupon the Israelites descended from their city; and loosed him; and brought him up to their governor.

The description, given both by Maundrell, and Poccocke, of mount Tabor, § is; that it stands in the great plain of Esdraclon, apart by itself, about two or three furlongs within the plain; ** and has so rich a soil upon it, as to be adorned with groves and clumps of trees. Its figure is nearly conical; and it is ascend'd by a winding path of about two miles. And on the south side, where the approach to the summit was rather more easy than on the other.

* Judith, chap. iv. ver. 5.

+ Ibid. chap. v. ver. 1.

‡ Ibid. chap. vi. ver. 6.

|| Ibid. ver. 12, 13, 14.

§ Poccocke's Travels, Vol. II. p. 64.

** Maundrell's Travels, p. 113.

there are many fosses cut. There are also some deep fosses on the north side. The plain on the top is about half a mile long, and near a quarter of a mile broad: being, as we learn from Maundrell,* of an oval figure; and inclosed with trees on all parts, except towards the south: which inclosure causes it to be in clear area only one furlong in breadth, and two in length. There are in this area a number of cisterns under ground; formed for preserving the rain water; and Maundrell informs us he found it to be good water.

Being a place of such vast natural strength, it was not only resorted to by Barak, in the time of the Judges of Israel, on the invasion of Sisera; but was in latter times, also made use of against Antiochus king of Syria (who besieged, and took it). And was again resorted to in the time of Vespasian; when it was fortified in a more improved manner, by Josephus, with strong walls.†

They were built, as that great Commander, and Historian, himself tells us,‡ in forty days time: when he furnished the place also with many materials; and with additional water *from below*, because of the great multitude of people that were here gotten together. And we find, by the subsequent history, that it was impossible for the army of Vespasian to ascend the mountain; and that he succeeded, against these Jews, only in consequence of a stratagem, by means of which he first drew the Jewish army down into the plain, and then cut off their retreat.

Of Bethulia, the same curious traveller whom we have just cited, says, || “that it is a fortress very strong by nature; being a “single hill, and very high; § and the top appearing like a mount “formed by art. It is laid out in terraces on its side; the first “rising about ten yards above the foot of the hill, and having the “hill very steep over it. There is on one side a gentle ascent

* Maundrell's Travels, p. 114.

† Vita Josephi, sec. 37. De Bello Jud. lib. ii. cap. xx. sec. 6.

‡ De Bello Jud. lib. iv. cap. i. sec. 8. || Pococke's Travels, Vol. II. p. 42.

§ When we consider that the Israelites, on their first invading the land, were only a few years before come out from Egypt, where all the inhabited parts were flat and level; and even the cities were placed only on banks, a little higher than the surface of the waters at the time of the overflowing of the Nile; there is every reason to conclude, that these sort of fortresses must have appeared to them very tremendous and inaccessible.

“formed by art;” and on the south, where the hill is not naturally so steep as in other places, is cut a deep fosse, to add a greater strength. There was a double circular fortification at top, which is of later date than the original fortress: and this stronghold has been made use of even so late as in the time of the Crusades.”

The magnificent and stupendous works of the Great Author of Nature, did most obviously dictate to the first inhabitants of the earth, in every country, almost uniformly the same modes of defence. And besides this, we may be assured, that those nations who in the most early periods had migrated into remote regions, and had thereby secluded themselves from the knowledge of improvements more rapidly made in the first civilized parts of the world, would still longer than others preserve the primæval customs, and the imitations of the first kind of fortresses that had been used.

Thus, amongst the Indians of South America, have been discovered Strongholds, of a very similar nature to the British. For Don Antonio de Ulloa tells us,† that one Indian method of fortification was, “to dig three or four ranges of moats quite round the tops of such mountains, as though high and steep, were not subject to frosts; every one of which moats was strengthened by a parapet (or bank), whence they could safely annoy the enemy. These they called *Pucuras*. The inmost bank was always higher than those which were outermost: and within this inmost bank and its moat, they built their huts, or barracks.”*

These kind of forts Ulloa says were so common, that one scarce meets with a mountain without them. And in some he says, the outward moat of circumvallation is above a league in circumference. On the peaks of Pambamaca alone, there are three or four of these antient hill fortresses.

As to the continued use of such fortresses, in regions, near to those where the invention of them had its origin; we have a very curious instance of the attack and surrender of one, in Sogdiana, in Asia, in the time of Alexander the Great; related by Quintus Curtius.‡

* This ascent seems obviously to have been a zig-zag path.

† Ulloa's Voyage to South America, Vol. I. p. 503, 504.

‡ Lib. vii. cap. xi. ed. Snakenburgii, p. 557.

It seems to have differed from those British Holds we have been describing, only in this one circumstance, that a great cave, situated much below the summit of the hill, induced the inhabitants of the country to make a plain spot there their stationary camp, rather than the summit itself; which very circumstance occasioned the loss of the place.

The rock must, from the description given by Quintus Curtius, have been indeed exceedingly high; though we may very well suspect the measures named by him, as given in our editions, not to have been exact; and that there has been some error in the transcribers.

“It was,” he says, “thirty stadia (or furlongs) in height, and
 “one hundred and fifty in circumference; being on all sides steep
 “and craggy; and accessible only by a very narrow path. In the
 “midway to the top it has a cave, whose entrance is strait and dark,
 “but by degrees grows wider; and further on has large recesses.
 “This cave also is full of springs, whose waters being united, as
 “they run down the rock, form a river. Here Arimazes, a Sog-
 “dian, had taken possession, with thirty thousand men all armed,
 “and had provided himself with necessaries for two years.

“Alexander, considering the difficulty of the enterprize, at first
 “resolved to leave it: but afterwards was seized with a violent
 “desire to get the better even of nature. To this end, after inef-
 “fectual treaties with Arimazes, he sought out three hundred of the
 “most active men in his army, who had been accustomed to feed
 “sheep in the most rocky countries; and encouraging these by a
 “promise of great rewards, induced them to attempt to scale the
 “mountain, in one of the steepest and least suspected parts, behind
 “the cave. Accordingly, having provided themselves with wedges
 “to fix in the clefts of the rock, and also with strong ropes, they
 “set about their work at the second watch; being furnished also
 “with provisions for two days, and armed with their swords and
 “spears. When they came to the steep part, some laid hold of the
 “broken crags to lift themselves up; others made use of ropes with
 “sliding knots, having fixed their wedges in the clefts to shift their
 “footing. Thus they spent the whole day in fear and labour; and
 “having surmounted great difficulties, they found still greater to

“ overcome ; and the rock seemed to grow in height ! It was a dis-
 “ mal spectacle, to behold those whose footing failed them, tumbling
 “ headlong down the precipice, and by their sad example shewing
 “ others what they were to expect. Notwithstanding all these dif-
 “ ficulties, however, they made a shift to get to the top ; having
 “ lost only thirty-two of their number. Here they set up the signal
 “ which they had agreed with Alexander to make ; who, perceiv-
 “ ing it, sent an officer to Arimazes again to demand his surrender ;
 “ and to shew him the soldiers who had gained the summit of the
 “ rock above the cave. The Sogdian, who had before treated Alex-
 “ ander with insult, and contempt, asking if his army had wings ;
 “ maintained the same haughty demeanour on receiving the sum-
 “ mons to surrender : but when he heard all the trumpets sounding,
 “ and the shouts in the Macedonian army, and was shewn, to his
 “ utter astonishment, the soldiers of Alexander on the summit of
 “ the mountain above, he was seized with extreme fear, not being
 “ able to estimate what number might be behind them ; and offered
 “ to yield up the rock, on condition of having the lives of himself,
 “ and of his men spared ; and sent down thirty of the most consider-
 “ able with these terms. But the king, incensed with the haughty
 “ answers he had before received, refused to hearken to any capi-
 “ tulation ; trusting to his good fortune ; although there was dan-
 “ ger that the Sogdians might in the interim discover how few the
 “ number of the men on the summit was ; and might overpower
 “ them, and cast them all headlong down. This resolution was not
 “ without success ; and Arimazes having descended with his rela-
 “ tions, and the chiefest of his men, Alexander caused them first
 “ to be scourged, and then to be crucified, at the foot of the rock.”

Perhaps the bold adventure of Jonathan, and his armour-bearer,
 related in the book of Samuel, * may be considered, as having been
 something similar to this of the three hundred Grecians : for the
 garrison of the Philistines which those two valiant men attacked,
 appears to have consisted (according to our translation from the
 Hebrew), of twenty men encamped on the summit of a sharp rock ;
 up the sides of which Jonathan climbed with great difficulty, and

* 1 Samuel, chap. xiv. ver. 14.

his attendant after him: and the spot on the summit, which was possessed by the garrison, is described as being only a small space, containing about half an acre of land; or as much as a yoke of oxen might plough.*

Many more instances of attacks of these sort of Strongholds might be referred to: which are interesting in the detail; but too numerous to be all inserted on this occasion. We cannot however pass by unnoticed, the famous rock of Dunbarton in Scotland; of which there was a scalado, even in modern times, not at all inferior to that by Alexander's soldiers: and especially as this was actually one of the very last posts held by the Britons against the Saxons; having been taken from them so late as the year 756, by Edbert, king of Northumberland; † and being mentioned by Venerable Bede, ‡ as one of the best fortified cities the Britons had during his days.

Mr. Pennant describes it, § “ as being a *two-headed rock*, of a stupendous height, rising in a strange manner out of the sands, and utterly detached from every thing else. Bounded on one side by the river Clyde, and on the other by the river Levin. In an hollow between the two summits, is a large well of water fourteen feet deep: and the sides of the rock are immense precipices, which often overhang.”

In very early times, Robertson says, the Britons had made § this rock a fortress. “ And, here in 1571, when it had for ages been no longer a mere rude British fortress, but was defended with a strong modern castle, a most gallant and enterprising officer, Captain Crawford, in the dead of night, in the very part where the rock was

* I cannot forbear adding, as another proof of the constant use of Hill Fortresses in those days, that at the same time that this bold adventure of Jonathan is mentioned, we are told (1 Samuel, chap. xiv. ver. 22.) of certain men of Israel who had hid, or secured themselves in Mount Ephraim, and who, when they heard that the Philistines fled, came down and pursued them in battle.

† Hoveden, A. 869. ‡ Bede Hist. Ecc. lib. i. cap. 1. It was first called *Alchath*; then *Brittanodunum*; and at last *Dunbarton*.

§ Pennant's Tour in Scotland, Vol. I. p. 228. And see also a view of it, in the Antiquarian Repertory, Vol. II. p. 141.

§ Robertson's History of Scotland, Vol. II. p. 12, 14.

“ highest, scrambled up, and fastened the top of a long scaling ladder of ropes, to the roots of a tree which grew in a cleft. To this cleft a small determined band ascended; and then a second scaling ladder was fixed in like manner. But in the midst of this second ascent, they met with an unforeseen difficulty: for one of their companions was seized with some sudden fit, and clung seemingly without life to the ladder. All were at a stand. It was impossible to pass him. And to tumble him headlong was cruel; and might occasion discovery. But Crawford’s presence of mind did not forsake him. He ordered this poor soldier to be bound fast to the ladder, that he might not fall when the fit was over; and turning the other side of the ladder outward, they mounted with ease over his belly. Day now began to break; and there still remained an high wall to scale. This, however, was also scaled; the sentry was killed; the garrison running out of their beds naked, to make a faint defence, were overpowered as fast as they advanced; and this fortress, deemed impregnable even when only a bare rock, with rude banks, was taken with all its munitions, cannon, and stores.”

A similar instance of an attack of one of these antient Rock Fortresses, in the country of Caux, in France, after its being also more strongly fortified in modern times, is mentioned in Sully’s *Memoirs*.

The manner in which Fescamp was surprised, and recovered, in 1593, we are told* well deserved a particular recital.

“ When this fort was taken by Byron from the league, in the garrison that was turned out of it there was a gentleman called Bois-rosé; a man of sense and courage; who making an exact observation of the place he left, and having concerted his scheme, contrived to get two soldiers, whom he had bound to his interest, to be received into the new garrison which was put into Fescamp by the royalists.

“ That side of the fort next the sea is a perpendicular rock, six hundred feet high; the bottom of which, for about the height of

* Sully’s *Memoirs*, Fr. ed. Vol. I. p. 301. Eng. ed. Vol. I. p. 344.

“ twelve feet, is continually washed by the sea, except for four or
“ five days in the year.

“ Bois-rosé did not doubt of accomplishing his design, if he
“ could contrive to enter by that side which was thought inacces-
“ sible. And this he endeavoured by the following contrivance to
“ perform.

“ He agreed upon a signal with the two soldiers whom he had
“ corrupted ; and one of them waited for it continually, upon the
“ top of the rock ; where he posted himself during the whole time
“ that it was low water. Bois-rosé taking the opportunity of a very
“ dark night, came, with fifty resolute men, chosen from amongst
“ the sailors, in two large boats, to the foot of the rock. He had
“ provided himself with a thick cable, equal in length to the
“ height of the rock ; and tying knots, at equal distances, run
“ short sticks through, to serve to support them as they climbed.
“ The soldier whom he had gained, having waited six months for
“ the signal, no sooner perceived it, than he let down a cord from
“ the top of the precipice, to which those below fastened the cable ;
“ by which means it was wound up to the top, and made fast to an
“ opening in the battlement, with a strong crow run through an
“ iron staple made for that purpose.

“ Bois-rosé giving the lead to two serjeants whose courage he was
“ well convinced of, ordered the fifty soldiers to mount the ladder
“ in the same manner, one after another, with their weapons tied
“ round their bodies ; himself bringing up the rear, to take away
“ all hope of returning ; which indeed soon became impossible :
“ for before they had ascended half way, the sea rising more than
“ six feet, carried off their boats, and set their cable a floating.

“ The impossibility of withdrawing from a difficult enterprize is
“ not always a security against fear, when the danger appears
“ almost inevitable. If the mind represents to itself these fifty men,
“ suspended between heaven and earth, in the midst of darkness,
“ trusting their safety to a machine so insecure, that the least want
“ of caution, the treachery of a mercenary soldier, or the slightest
“ fear, might precipitate them into the abyss of the sea, or dash
“ them against the rocks ; add to this, the noise of the waves, the
“ height of the rock, their weariness, and exhausted spirits ; it

“ will not appear surprising that the boldest amongst them trem-
 “ bled; as in effect he who was foremost did. This serjeant, telling
 “ the next man that he could mount no higher, and that his heart
 “ failed him, Bois-rosé, to whom this discourse passed from mouth
 “ to mouth, and who perceived the truth of it by their advancing
 “ no higher, crept over the bodies of those that were before him,
 “ advising each to keep firm, and got up to the foremost, whose
 “ spirits he at first endeavoured to animate; but finding that gen-
 “ tleness would not prevail, he obliged him to mount, by pricking
 “ him in the back with his poignard; and doubtless, if he had not
 “ obeyed him, he would have precipitated him into the sea. At
 “ length, with incredible labour and fatigue, the whole troop got
 “ to the top of the rock, a little before the break of day; and was
 “ introduced by the two soldiers into the castle; where they began
 “ to slaughter, without mercy, the centinels and the whole guard.
 “ Sleep delivered up the garrison an easy prey to the enemy, who
 “ killed all that resisted, and thus possessed themselves of the
 “ fort.”

We have here therefore, still further, an instance of the prodigious natural strength of an original Hill Fortress amongst the *Gauls*; whose every mode of offence, and defence, we are assured on the authority of the most celebrated contemporary historians, corresponded very nearly with the devices of the *Britons*. And we find here also, this primæval fortress continued in use, and strengthened with additional works, like Dunbarton, through a long succession of ages; and distinguished for its inaccessible situation, and supposed impregnability to the very last.

Just thus the late residence of one of the *Moraltoe* Chiefs in India,* is represented to have been at a fortress called *Raree*, in the mountains of *Deccan*. A fortified mound of rocks, extremely high, and so steep, as but by one narrow path to be accessible to human footing; with this advantage, that the enclosure, on the summit, is large enough, independent of the stores accumulated there, to grow grain sufficient for the maintenance of a garrison; which however small the band might be, could with ease defend the rock against the

* It is mentioned, on report only, in Grose's Voyage to the East Indies, Vol. I. p. 33.

greatest armies that could be brought to take it. Whilst, at the same time, all the passes and defiles leading thereto amongst the mountains, are both rugged and narrow.

We ought perhaps also to recollect, what is said* of a fortress called *Amba Geshen* in Ethiopia: that it is a mountain almost impregnable: every way steep, prodigiously high; and in form of a vast *natural castle* of stone. At the top it is about half a Portugal league in breadth, at the bottom near half a day's journey about: at first easy to be ascended, then steep and rugged; insomuch that the *Abyssine* oxen, that otherwise will clamber like goats, must be craned up, and let down with ropes.

As this little detail of these few curious fragments of history, is even *necessary*, to enable us fully to comprehend the true nature of these original Fastnesses, and Strongholds; so our remarks concerning them, should not be concluded without referring still further to the descriptions given us, in the Scriptures, of David's retreats from the pursuit of Saul. For they clearly shew, that some of his strongholds to which he resorted in his distress, with his band of men, most exactly resembled the antient British fortresses. And that, as these latter were continually in use, from the earliest ages of which there are any traces in this country, down even to the fifteenth century; so those in Palæstine seem also to have been used, from the very earliest time that the Canaanites dwelt in the land, and through all the period that the Judges ruled in Israel, down to the days of King David: as indeed they were also still further used, down to the time of Vespasian, and Josephus, and to the destruction of the Jewish state.

When David was in danger of being treacherously delivered up at Keilah, we are told,† that he and his men departed, and went and abode in the wilderness, in strongholds: and remained in a rock of a mountain, in the wilderness of Ziph. The name of this hill, or mountain, we find was Hachilah.‡ And like mount Tabor, it abounded with trees and wood. When David knew of Saul's design to search for him here, we read || (as the corrected translation in the

* Ludolphus's History of Ethiopia, p. 29.

† 1 Samuel, chap. xxiii. ver. 13, 14.

‡ Ibid. ver. 19.

|| Ibid. ver. 25.

margin of our Bible has it), he came down from the rock, and abode in the wilderness of Maon: which (from comparing together verse 24, and verse 19, and verse 14, of the twenty-third chapter of the first book of Samuel) appears to have been identically the same as the wilderness of Ziph, in the neighbourhood of Hachilah. And being thus come down into the low country, at the roots of this mountain (which like Tabor, and Bethuliah, seems to have been insulated); whilst Saul went on this side the mountain,* David and his men went on that side the mountain; and so escaped.

A second time also, we find † David making use of this stronghold. And then it was, that Saul, rashly attacking it, and encamping on the side of the hill, would certainly have lost his life; had it not been for the noble and generous temper of mind which David possessed, and for his great fear of God.

By the help of all these various illustrations; by means of such traditions as are still preserved; and from the very derivation of many of their names; we may now plainly, and exactly enough perceive, of what kind of construction the Fortresses of the most original British inhabitants of this country were. The very first efforts of human industry, and ingenuity, here exercised, to provide means both of quiet habitation, and defence.

And the account of these Hill Fortresses cannot with propriety be closed, without bringing to remembrance the *last* use made of them, by the unhappy primæval inhabitants of England, against the united arms of the Picts, and Saxons: when in these very fortresses, they were either taken by storm, and slain;—or starved into a surrender;—or compelled to lurk, a few miserable years, like beasts of the forest.

The words of the Venerable Bede, ‡ concerning this dire catastrophe are,

“ Nonnulli de miserandis reliquiis in montibus comprehensi
 “ acervatim jugulabantur: alii fame confecti procedentes manus
 “ hostibus dabant, pro accipiendis alimentorum subsidiis æternum
 “ subituri servitium, si tamen non continuo trucidarentur: alii

* 1 Samuel, chap. xxiii. ver. 26.

† Ibid. chap. xxvi. ver. 1.

‡ Hist. Ecc. lib. i. cap. 15.

“perstantes in patria trepidi pauperem vitam in *montibus*, silvis, vel
“*rupibus arduis* suspecta semper mente agebant.”

It will now tend in no small degree to perfect our ideas with regard to this matter; if we still further consider, that there are vestiges of many Hill Fortresses of a very similar kind, in the neighbouring island of Ireland.

They are there called *Raths*: and it has been very judiciously observed concerning them, that they are as falsely ascribed to the Danes, as the *Tumuli* in Ireland are.* Since there is positive proof, in the accounts of the life of St. Patrick, that they existed, and were found in Ireland, some centuries before the Danes ever set foot in that country.

And indeed the strongest advocates for any of them being the works of Danish invaders, do fairly after all confess, that as, on the one hand, tradition is now almost silent concerning these strongholds; so on the other, most of them must be allowed to have been so exceedingly antient, and to have undergone so many changes since their first formation; that it is at least very difficult to determine *what* their original really was.†

They ‡ are plainly to be distinguished from such circular high mounts as were of a sepulchral kind, by their being constantly contrived with ramparts, ditches, or intrenchments round them, for the defence of those that kept within; whereas the sepulchral hills are not at all encompassed with works of this sort. To which it may be added, that although indeed these latter, like the fortresses, are round, steep, rising elevations; yet they are plainly, quite from the bottom to the top, mere heaps of earth and stone, cast up by hand; and raised from the surface of the earth itself; and wholly formed by art; whereas the fortresses, especially the largest, do owe their height more to their natural situation than to art, as being placed upon some mountain, or rising hill, having the intrenchments dug out of the hill on which they stand.

They are intrenchments thrown up *on the very tops of hills*: sometimes with two or three, but more frequently with a single

* Gough's Camden, Vol. III. p. 482.

† Wright's Louthiana, p. 11, 12.

‡ Molineux's History of Ireland, p. 208.

ditch. The word itself, *Rath*, also, signifying properly a *Surety*: and the *Rath* being uniformly allowed to have been the antient abode, or Castle of the old Irish Chief.

It appears, by a careful inspection of the remains of several, that in these *Raths*, the habitations of the Chief of the district, and his family, were constantly placed; consisting in general only of small buildings, constructed of earth and hurdles; or rather, having the lower parts formed merely like banks of earth, upon which they erected wooden posts covered with hurdles. They contained for the most part one apartment only; few had two; and the number of these separate huts in each *Rath*, as appears from the careful examination of very many,* was generally from four to eight; whilst the numerous lesser huts of the vassals, and of the country people assembling on any emergency, together with the cattle, were placed within a surrounding fence, lower down the hill. There was also belonging to several of these *raths*, a *cave*; where provisions were laid up, and where was a still safer retreat, in time of extreme danger. These caves are mentioned in the Icelandic annals;† and numbers of them have been continually discovered, either directly under the *Raths*, or near adjoining. And oftentimes there are found near the *Raths*; and especially in those parts where the vassals and inhabitants of the neighbouring country took up their abode, very small *tumuli* of earth, with each a cavity, or sort of *crater* at top, containing ashes. These were their *cuci*, or *koocky*; a sort of kitchens;‡ in which they dressed their victuals, by means of lighting a fire in the cavity, and then suspending on the top, with the help of wooden stakes, the skin of a cow, or other animal; into which, as it hung like a sort of bag, they poured water, together with the flesh; in the same manner nearly as was practiced by the Scots many ages afterwards.

A very curious plan and view of one of the most perfect of these *Raths*; that of *Ardscul*, about three miles from Athy, on the road to Dublin, in the county of Kildare, is given by Mr. Gough, in his

* Gough's Camden, Vol. III. p. 483. † See Ant. Celto-Scandica, p. 14.

‡ There are good representations of two of these kitchens, in Gough's Camden, Vol. III. Plate xlii. fig. 1 and 2, p. 483.

additions to Camden.* The great ditch incloses an area of about one hundred and fifty feet long, and one hundred and ten wide, situated forty feet above the level of the country; which is now all around almost one entire bog, and was in antient times covered with an extensive forest. In this area appear the remains of the rude habitations of the chieftain, and his retinue; and there still exists a well.

Another curious *Rath* remains near Kilcullen, in the county of Kildare, called Cnoch Caellagh. It is surrounded by a circular intrenchment twenty feet wide, and ten high. On this some appearance of streets may be traced. And it was deemed so good a station, that even Oliver Cromwell is said to have encamped on it, in his way to the south.+

There is also a *Rath*, in which may be discovered the foundations of the small kind of buildings beforementioned, on the hill of Mullahmast, in the barony of Norrah, in Kildare county; near which are, as further indications of high antiquity, a round pillar stone; and a number of sepulchral tumuli: and near which a battle is said to have been fought, in the third century, between the Leinster, and Munster forces.

And another curious remain, that obviously appears to have been somewhat of this kind, is that on the top of *Sliabh Guth*, or Church Mountain, in the county of Wicklow; where is an immense bank of rude stones, inclosing an area, in the which is a well. For although there is now an idle tradition, that these stones were collected in the twelfth century, to build a church, or to pave a road; yet it manifestly appears from the plan and view given by Mr. Gough,‡ as well as from its situation and magnitude, that it must have been originally designed for a fortress.

But still more particularly for our purpose, by way of illustration, is a fortress in the county of Louth.

We there find, on the summit of a natural hill, near *Castle Town* (which seems to have taken its name from this very fortress), not far from Dundalk, a great mount raised to about fifty feet,

* Gough's Camden, Vol. III p. 483, and Plate xlii. fig. 2 and 3.

+ Ibid. p. 543.

‡ Ibid. Plate xlv. p. 552.

surrounded with a magnificent ditch; and on the outside of this ditch (nearly in the same manner as at the Herefordshire Beacon), on the east, and west sides, are two plains, or lower camps, for cattle, and for fugitives; like a sort of redoubts; which are again themselves surrounded with a ditch; and, together with the mount, cover the whole summit of the hill; making a very formidable and grand appearance, for several miles to the north, and south.

Mr. Wright, in his Louthiana, has given a plan and view of this stronghold;* in which appears also a *stone pillar*, standing at a little distance. And though he ventures, in the outset of his description, to pronounce it to have been an undoubted station of the Danes; yet it plainly appears that he had not so good authority for such an assertion: as for his conclusion, *that perhaps AT LAST this became a royal or chief Danish station.*

It is very possible, the Danes might make use of it as a munition, after they had gotten it into their possession: but the stone pillar; the greatness of the work; and what has in the preceding pages been observed concerning the general existence of such kind of fortresses *before ever* the Danes had any footing in Ireland; may lead us surely to place its origin much higher.

As, however, on the one hand, the Danes might possibly make use of it in after ages; so it is also, on the other, much deserving our attention, as has been remarked by Spenser,† that these fortresses amongst the Irish, in still later times, became moreover places to hold assemblies, *to parley* about matters in dispute; and about wrongs between township and township, or clan and clan. And became a sort of *folk-mote*; as such kind of original artificial hill works seem subsequently to have done, about the Saxon æra, in various parts both of England, and Scotland.

Even when they ceased to be regular fortresses, these hills had their use; in being places to which the adjacent inhabitants of the country, in case of any sudden alarm, could repair with speed, and there remain safe, till they could assemble themselves in greater strength; as whosoever came thither first, even if they were but

* Book i. Plates viii. and ix. p. 7. † See his View of the State of Ireland. L'Estrange's edition of Spenser's Works, folio, p. 227.

very few in number, could, in consequence of the narrow entrance, and difficult access, easily rest safe, and defend themselves till succour came.

Somewhat similar to the fortress just described in the county of Lowth, is one near Down Patrick, in the county of Down, described by Dr. Molineux;* and of which he has given a curious engraving.† It is surrounded by three great ditches, and ramparts; and between that surrounding the foot of the mount, and the second next unto it, is extended, on one side, a plain, forming a lower camp; similar to the great lower camp in the preceding instance.

Dr. Molineux indeed supposes this to have been, a Danish camp; as Mr. Wright supposes with regard to that at Castle Town. But can any one who allows himself sufficient time to reflect, be satisfied with such a conclusion; or think that this was originally a Danish work? when there is no sort of positive authority for any such conjecture: and when, at the same time, we are informed,‡ that the Danes, in the ninth, and tenth century miserably defaced a church, in the neighbourhood; which therefore must have been built, by old Irish inhabitants, having full possession of this place, long before the Danes came hither; and when a large Remain, which must have been prior even to the Church, a great druidical *Cromlech*, on the top of a mountain near adjoining, shews that this spot was considered as a place of great distinction, long before any invasion of the Danes.

To these remarks, concerning the Irish fortresses, it may be added, that there are also still remaining, in several parts of Ireland, small mounts, on plains, and near rivers, surrounded with two or three strong ditches, including a small area round such mounts: and that such plainly appear to have been the private habitations of the little petty Chiefs, of the several subordinate districts; and are allowed, by tradition, to have been so.

Some of these are particularly described, and represented, in the Louthiana. ||

* In his History of Ireland, p. 205.

† Ibid. p. 212. fig. 10.

‡ Gough's Camden, p. 620.

|| See more particularly Book i. Pl. v. fig. 1 and 2.

And in the largest of them it may be observed, that on the summits, there is often a great hollow excavation; similar to the pits that have been already described as existing on the Combe Hills, in Surrey, and on Thetford Hill, in Norfolk. Hollow retreats, intended both for security, and for warmth, and shelter.

To return again, therefore, to our own country; before we finish our observations concerning these kind of strongholds; it may be added, as a very singular confirmation of all that has been remarked; that there is *no one* spot in this island, that tends more fully to illustrate the true nature of these exceeding antient, and aboriginal fortresses; than that which may almost be deemed modern, in comparison of the others we have been describing; and which we have still existing, in the hill called *Old Sarum*, in Wiltshire. A fortress which it is proper to describe nearly *last of all*; because it continued in use, even as an *inhabited city*, longest of all.

Here there not only was, as the whole form shews, and as is consistent with all tradition, and the most authentic histories relating to it, an antient, and original British Fortress; and afterwards a City; which was made a place of great strength, and inhabited under the dominion of the Romans; and which was taken at length by Kenric the Saxon, in 553. But after it had continued for many ages the residence of Saxon kings; this Stronghold was in the end converted into a Norman city, having a cathedral placed within its munitions; and having an high castle, on the summit of an inner mount, in its centre: and in this state it continued in full splendour, the occasional residence of Norman princes, till the time of Henry III. The stone walls of this Norman city were twelve feet thick, with twelve towers; and those of the castle above were stronger still.

Its original and singular peculiarity, as a *British Fortress*, could however never be obliterated, in all its successive changes; for *such* it most fully and plainly appears *still*; although every other mark of its greatness is obliterated: and of its Saxon, and Norman towers, and cathedral, no traces hardly remain; nor is there scarcely one stone left upon another.

Here, there is much reason to think, the Emperor Severus sometimes took up his abode. Here, unquestionably, dwelt many noble Romans; as is most evident from the coins of Constans, Magnen-

tius, Constantine, and Crispus, that have so frequently been found amidst its ruins.

Here King Edbert resided very much. And here King Edgar held a great council, in 960.

Here William the Conqueror summoned all orders of the kingdom, to swear allegiance to him. And here, from its cloud-capt towers, the haughty garrison of King Stephen poured down disdainful reproaches, and insults, on the city at their feet; whose inhabitants dared not, in those times, even to creep down further, to the bottom of the hill, to escape from their dominion.

Continuing as a city of such dignity so long, this place affords a decided proof, amongst others, that the apparent want of water in such situations, could be no essential objection to such spots being used as permanent habitations. For here dwelt a multitude throughout many ages; till, as civilization, and ideas of freedom increased, in the time of Henry III. the desire of avoiding the oppression and insults from the proud garrison above their heads, *rather than the want of water*,* induced the inhabitants to remove to the open plain beneath; where Bishop *Poor* began to build for them the present magnificent church of Salisbury: and to this place, even the very stones and rubbish of Old Sarum were by degrees conveyed; as the remains of Babylon were to Bagdat; and those of Memphis to Cairo.

Not having met with any representation or plan of this most remarkable stronghold, that appeared to me, on examination, to be truly accurate; I here subjoin the best I could form, on the spot; to convey more fully my ideas concerning it.

Pl. III. fig. 1. Represents a view of Old Sarum, as it appears at a distance. And

Fig. 2. Is a plan; as near the real form as I could discern by my eye, standing on the high mound surrounding the summit.

The letters of reference in both correspond.

* The unpleasant mode of being supplied only with rain water, in cities, was no uncommon thing in antient times. We find that in Galilee, in the days of Josephus, † the city of Jotopata, which was built on a precipice, having on all sides, except one, valleys immensely deep, and steep; was supplied merely with such water: there being no fountain whatever in the city.

† De Bello Jud. lib. iii. cap. 7. sec. 7 and 12.

The whole is surrounded by a ditch at the bottom (*ffff*), and then by an high steep bank; the principal entrance being in a very singular manner by two narrow passes (*i i*) on each side of a most remarkable mount at (*g*), like a rude sort of horn work; which has a strong and deep ditch, and high bank, of its own, of the form in the plan.

There was also an entrance, or rather a postern gate, very nearly of a similar kind, only with its mount more rounded, on the opposite side of the foot of the hill.

Both these, however, were clearly of a somewhat later construction than the original British fortress. But having passed through these, we find, now remaining, what in almost every respect clearly existed before any Roman, or Saxon, or Norman additions were ever made.

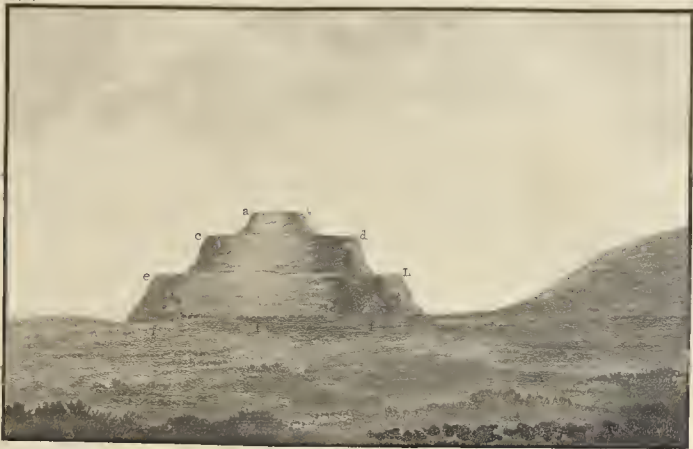
At (*el*) appears a plain elevated space (*hhhh*), which served throughout all ages for *suburbs*; and did here, in every sense of the word, most truly correspond with its name.

Within this was another deep ditch, surrounding the next or inner mount that formed the city. And over this ditch, after climbing the side of the mount, which ascends exceedingly high and steep from it, at (*n*) was the principal gate of ascent to the great plain (*cd*); which, in the earliest periods, served only to contain the cattle of the Britons, and mere huts of their fugitives; like the plains described on the Herefordshire Beacon; but afterwards was adorned with a regular city: wherein, in Norman times, the cathedral stood, nearly in the spot marked by the dotted lines, on the west side. To this city there was another gate of entrance at (*o*). The whole being divided by a ditch, running north and south, so as to secure one half, in case the other should be taken.

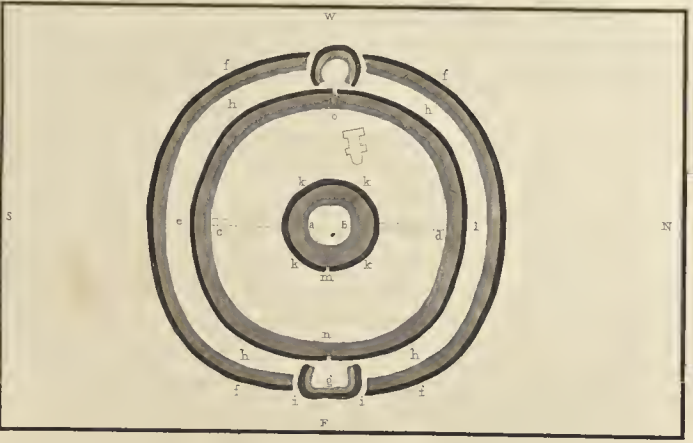
In the central part of this plain is another deep ditch (*kkkk*). Within, and from which rises very steep the higher part of the hill (*ab*); which was surrounded at the top, at first by a great mound; and in after ages by a strong wall: the ascent to it being through a narrow pass at (*m*).

Within this mound was the original British fortress (*ab*). And besides the contrivances of ditches and reservoirs to preserve all the rain that at any time fell *here*, on the summit, tradition says was an

F.1.



F.2.



Old Tarun



exceeding deep well; as there were also, in later ages, four others on the next lower terrace, where the city stood.

The mouth of the well, that was in the Keep above, may still be discerned. And in the year 1795, a very curious subterraneous passage, which was most probably made in Norman times, descending from the summit, in the north-east quarter, through the hill, was discovered.

The entrance from above to this, was by a door way, near four feet in width, (a part of the square stone columns of which still remained, of eighteen inches by twenty-seven, with neat masonry of good free-stone adjoining), and from hence a covered way, about seven feet in breadth, and from seven or eight to ten feet in height, descended in an angle nearly parallel to the glacis of the side of the hill, with regular steps, to the distance of one hundred and fourteen feet; but could not be traced any further, because of the loose chalk and rubbish that had rolled down to the bottom.* The arch over head is circular, and manifestly artificial. And there are also manifest marks of the tool on the side walls. The steps of descent are cut in the chalk rock, and obviously not much worn; which indicates the secrecy of this passage. It was filled up after its first discovery, but was soon opened again.†

Somewhat similar to Old Sarum, is the hill called *Badbury Rings*, about three miles and an half from Winburne, in Dorsetshire. It has passed with many for a Roman camp; because Roman coins, urns, and a Roman sword, have been dug up here in 1665.‡ And it has by others been deemed *Saxon*; because Leland, speaking of Winburne, says, || *the Saxon kings had hard by the toune a castelle, now caulled Badbyri, but clerely down. The diches, hilles, and site ther of*

* The account of the first discovery of this passage, by means of some earth falling in, was given in the *Centleman's Magazine*, Vol. LXV. for 1795, p. 95. An additional account, and sketch, is added, p. 193.

† See also Vol. LXVI. for 1796, p. 185; where is a further representation of a neat little brass double cross, that was ploughed up on the lower bank, or ring.

‡ Gough's *Camden*, Vol. I. p. 53.

|| *Itin.* Vol. III. p. 54; and *Camden*, Vol. I. p. 46.

be yet evidently scene. It is remarkable, that he adds the words, now *Conyes-borough*; which name is well known to denote a royal residence.

But though the Romans might unquestionably make this a station: as they unquestionably did make the same use of several other strong British posts: and though, from the advantage of its situation, the early Saxon kings might afterwards reside here; as its name, *Conyes-borough*, certainly imports, as well as its later name of *Kingestown Lascy*, found in certain writings, as Leland tells us; yet its form, so unlike any thing that either Romans or Saxons ever constructed, shews it to have been originally truly *British*. And it is very remarkable, that another similar British post, in Dorsetshire, is seen from its summit; that a chain of such Hill Fortresses, within sight of each other, runs quite through the county; and that it stands on the very same Roman road that Old Sarum does, the Ikeneild Street; a road which probably was made to pass in this very direction, on account of the great strength of these two prior, and most antient British Strongholds.

A representation of this interesting Remain, with which I have been favoured by my most ingenious and very curious friend, the well known Mr. Tiberiüs Cavallo, I have inserted, Pl. $\frac{iii}{2}$: and the rather, because, by the aid of his mathematical science, he has given a fine illustration of the great extent of country which these sort of camps were made to command; and also the exact bearings of the several distant objects.

Hodd Rings, a sort of similar intrenchment, at ten miles distance; and *Hambledon Hills*, nearly as far off; and *Spilsbury Rings*, at four miles distance.

The whole circuit round the hill, and the extent of country, bounded by the clouds and the horizon, is represented, fig. 1.; and fig. 2. shews the appearance of the elevation of this antient Stronghold; where the conical hill, in the centre, appears to have been very probably somewhat increased in height, by the additional ruins of the Saxon castle.

The extent of the area above, from (a) to (b) is eight hundred and seventy feet. And for the satisfaction of those who are parti-



cularly curious, Mr. Cavallo's list of the distances of all the objects, is added in a note.*

It is perhaps in this place, more than in any other, most proper

* List of objects seen from Badbury Rings, Dorset, with their distances from that place.

| | Miles. |
|---|--------|
| Dean's Leaze, a house belonging to Captain Bingham | 2½ |
| Witchampton Church | 3 |
| Horton Observatory | 5½ |
| Gate of Mr. Bankes's Plantation | 6½ |
| High Hall, the seat of H. W. Fitch, Esq. | 2½ |
| Christ Church, Hants | 12 |
| Isle of Wight | 22 |
| Hengistbury Head | 13 |
| Merly, the seat of J. Willett Willett, Esq. | 4½ |
| Kingston Hall, the seat of H. Bankes, Esq. | 1½ |
| Corfe Mullen | 3½ |
| Knowle, the seat of Mrs. Drax | 4 |
| Lytchett Beacon | 5¾ |
| Isle of Purbeck | 15 |
| Mr. Churchill's Summer-house | 3¾ |
| Henbury, the seat of W. Churchill, Esq. | 3¾ |
| Earl of Strafford's seat | 3½ |
| Bailie Parsonage; Rev. Mr. Harris | 3 |
| Sturminster Marshall Church | 2 |
| River Stour | 2 |
| Charborough. Seat of R. Grosvenor, Esq. | 4½ |
| Woodbury Hill, a Roman camp | 9 |
| Shapwick | 2 |
| Colwood | 5 |
| Mr. Fane's plantation | 5 |
| Mr. Mackrell's house at Spetisbury | 3 |
| Spetisbury Rings, called a Roman camp | 3½ |
| Mr. Jekyll's seat at Spetisbury | 3½ |
| Earl of Dorchester's plantation, near Abbey Milton | 10½ |
| Spetisbury Parsonage; Rev. Thomas Rackett | 3¾ |
| Plantation near Bull Barrow | 10 |
| Mr. Portman's Cliff, near Blandford | 6 |
| Ashley Wood | 3 |
| Snow's Folly | 4 |
| Hodd, and Hambleton Hills; called Roman camps | 10 |
| Blandford Race Down | 5 |
| Tarrant Gunville, the seat of Anthony Chapman, Esq. | 6½ |
| Melbury Hill | 12 |

to take some notice of a little mistake, into which Mr. Grose seems to have fallen, in consequence of having drawn a general conclusion too hastily.

In the county of Galloway, in Scotland, at a place called Urr, he found a mount, or hill, with outworks, which on a small scale, does indeed very much resemble* both the mount at Old Sarum, and also that of Badbury Rings. It is called *the Mote* of Urr; and he understood, both from the meaning of the original Saxon word *Mote*, and also from the tradition of the country, that when Galloway was an independent state, this was the court where the Reguli, or petty kings of that district, held their national councils; and promulgated such new laws and regulations, as were found necessary from time to time to be enacted. And that it was also the seat of judgment, where their doomsters, or judges, tried capital offenders. And finding such another mount, or hill, appropriated to the same uses, at *Tinewald*, in the Isle of Man, he directly concluded, that wherever antient mounts, without buildings upon them, are found near castles of the later ages, that they never were any thing else than mount *motes*, or court *hills*; raised merely for holding *such assemblies*: not considering, that the very reason why they were *motes*, or *courts* at all, was merely that some great Chieftain, or Baron, once had his residence *there*; and that the *Baronial Court* accordingly attended upon the residence of the lord.

The foundations of the antient Keep towers, both at Old Sarum, and at Oxford, and elsewhere; and the uniform appearance of all antient British Fortresses, lead us most obviously to understand; that whether raised in British, or Saxon, or Norman times, they were all originally, according to the different modes of fortifying in those different ages, *fortresses*; and occasional Residences of Chieftains; from the very first. And that for this very reason only, *motes*, or *courts*, were held there.

Such another kind of old British Fortress nearly as Badbury Rings, is to be found in Annandale, in Scotland; and is called *Wood Castle*. It has even a strong resemblance to Old Sarum; and, like it, was unquestionably used afterwards as a Roman post.†

* There are two representations of it, in his *Antiquities of Scotland*, p. 181, 182.

† It is to be found represented in General *Rey's* *Military Antiquities*, Pl. viii.

And surely we may now, without any deviation from our subject, add, that one cannot reflect upon any of these very antient fortified abodes, and especially upon *Sarum*, in all the various periods of their existence, through so many successive ages; nor upon any of the aboriginal Hill Fortresses, and Strongholds on rocks, that from the earliest times have been devised in various regions of the earth; without perceiving most forcibly, the beautiful energy of those plain and simple poetical similitudes, so often made use of in the Psalms.

*Be Thou my strong rock, and house of defence: that Thou mayest save me. For Thou art my strong rock, and my castle: be Thou also my guide, and lead me for Thy Name's sake.**

O set me up upon the rock that is higher than I: for Thou hast been my hope, and a strong tower for me against the enemy.†

Be Thou my stronghold whereunto I may always resort: Thou hast promised to help me; for Thou art my house of defence, and my castle.‡

We instantly see, in the clearest manner, on considering the kind of munitions described in the preceding pages, from whence it was that the Royal Psalmist must have taken his so poetical, and descriptive ideas of Safety, Strength, and Security.

And that he actually did do so, is still further confirmed by the words of the prophet Jeremiah, || when he says; *Truly in vain is salvation hoped for from the HILLS, and from the multitude of mountains: truly in the Lord our God is the salvation of Israel.*

These Hill Fortresses, however, were sometimes turned into dens, for the mere support of plunder, and tyranny; and to this circumstance surely those words, also of the holy Psalmist allude, where it is said, § *Thou art of more honour and might: than the hills of the robbers.*

And how far these high hills, and strongholds, were, in some instances, from contributing to the peace and quiet of mankind, in latter ages, even in this country; although they were originally resorted to, as places of protection; is most feelingly represented by Peter of Blois, in his Epistles;*** who says, concerning this very fortress of Old Sarum, it was,

* Psalm xxxi. ver. 2 and 4.

+ Psalm lxi. ver. 3.

‡ Psalm lxxi. ver. 2.

|| Jeremiah, chap. iii. ver. 23.

§ Psalm lxxvi. ver. 4.

*** Epist. civ. p. 165.

A place, that was open to the winds, barren, dry, and desert: wherein stood a tower, like that at Siloam, which oppressed the townsmen with the burden of long servitude.

And such as this, was, in reality, the origin of almost all the first enormous exertions of power on the face of the earth.

For such was at first, *Ecbatana*, in Media; which there will be occasion to mention more particularly hereafter.

Such was, in a degree, even the infant power of Rome itself.

And such also was originally, even the Acropolis at Athens; where Theseus assembled around him the scattered clans, and tribes of the Athenians. It was adorned, in later times, with superb buildings, by Pericles; but what its origin really was, will most clearly appear to any discerning eye, that has an opportunity to examine the fine and accurate drawings, made by Mr. Reveley, of the rock itself, in its present state.

The Acropolis, the summit of the insulated rock, was long the whole of the city; and was called Cecropia, from Cecrops, its founder. And when the city had extended all round its basis; *this*, which was become the citadel, was still only surrounded with wooden walls: insomuch, that so late as on the invasion of Xerxes, when an Oracle had advised the Athenians to defend themselves *with walls of wood*, some of them, instead of having recourse to their navy, thought they were only to enter the Acropolis; and (shutting themselves up there) to defend it.*

As to Rome, we read in Plutarch,† that the design of founding a new city being formed by the two brothers, Romulus and Remus; the latter of them at *first laid out a piece of ground for that purpose, on the Aventine Mount*, WELL FORTIFIED BY NATURE. Which description plainly denotes both the smallness of the scale of such a city, and the security intended, from its situation on a rock. And when Romulus had prevailed, by augury, and treachery, to have it seated on another spot; still the account of it is of a similar kind. It was only, at first, *a small square*; and afterwards *a circle*, including rude hovels; and surrounded by a ditch, and trench, and wall; the superstitious mode of constructing which, Plutarch fully describes.

* Syrianus in Herm. Corn. Nepos. *Themistocles*, cap. ii.

† In his *Life of Romulus*.

This was confined solely to the summit of the * Palatine Hill: and it was not till long after, that the Mons Coelius was first added by Tullus Hostilius; then the Aventine Mount in the time of Ancus Martius; and afterwards the Mons Janiculus. The Capitol not being reared on the Tarpeian Rock, till so late as the time of Tarquin the Proud, above two hundred years afterwards. So that the real cause of the great city of Rome, the mistress of the whole earth, being built upon *seven hills*, seems to have been simply, that its first inhabitants fortified the summits *of rock after rock*, for defence; just as they were able; till they had at last joined them all seven together. The Capitol itself, the glory of the whole, being on an high ridge, including about four acres, and ascended by an hundred steps.

And as, in illustration of the origin of the rude Hill Fortress of *Old Sarum* in this island, which afterwards became a city of the first distinction here, and continued to be such for so many centuries, I have ventured to mention both Athens, and Rome; so it deserves to be remembered, that even the city of David itself, the Citadel of Jerusalem, was originally nearly of the same kind. For the Jebusites, in the very first ages of the world, had fortified themselves so strongly on this natural rock, that although the Israelites took Jerusalem in the days of Joshua, they could by no means drive *them* out from their hill;† but the Jebusites continued fixed there till the time of David; at whom, when he attempted first to lay siege to this Stronghold, they scoffed exceedingly;‡ being persuaded that all his efforts would be in vain.

The manner of its being taken sword in hand by Joab, who first ventured to scale the ascent, is briefly told in two passages, which intimate the exceeding steepness of its situation. || And Josephus speaking of it in later ages, when it had been fortified by Herod, tells us also of its exceeding steepness;§ and of the admiration which Titus expressed with regard to its strength, when the Jews had deserted it.

It was then called the Upper City; and was the last place to

* Livy, lib. i. sec. 6, 30, 33, 35.

† Joshua, chap. xv. ver. 63. ‡ 2 Samuel, chap. v. ver. 6.

|| 2 Samuel, chap. v. ver. 8. 1 Chronicles, chap. xi. ver. 6.

§ Josephus de Bello Judaico, lib. vi. cap. viii. sec. 1. et cap. ix. sec. 1.

which the zealots resorted for security,* after the Temple was taken. It had been joined to the Temple by means of a bridge.† And had three strong towers, named *Hippicus*, *Phasaelus*, and *Mariamne*, built upon its old walls by Herod:‡ which towers were so exceeding strong and beautiful, that when Titus destroyed every other part of the fortifications of Jerusalem, he yet left these standing;|| after the Jews had at last of their own accord deserted them. And he declared openly; “ We have certainly had God for our assistant in this war: “ and it was no other than God who ejected the Jews out of these “ fortifications. For what could the hands of men, or any machines, do towards overthrowing these towers.”§

Josephus says it was the royal palace;¶ and that Simon dwelt in one of these towers.†† And speaking of the Jews deserting this fortress at last, of their own accord, he adds, “ Thus did the Romans, “ when they had taken such great pains about weaker walls, get, “ by good fortune, what they could never have gotten by their “ engines.”‡‡

From the manner in which Simon attempted to make his escape, it also appears that there were subterraneous caves, and private passages, hewn out of the rock, from the interior parts of this Stronghold. For we are told, ||| “ that he let himself, and those that were with “ him, down into a certain subterraneous cavern, that was not visible above ground. And that as far as had been dug of old they “ went onward along it. And then, as he had taken miners, and “ those who cut stones with iron tools, and a great quantity of provisions for to support them, they proceeded where they met with “ solid earth, to dig a mine under ground, in hopes they should “ be able to rise from thence, in some safe place, so as to make their “ escape. But when they came to make the experiment, their progress being slow, they at last emerged just where the Temple had “ formerly stood; and so were taken by the Romans.”§§ Which

* Josephus de Bello Judaico, lib. v. cap. x. sec. 5. lib. vi. cap. vii. sec. 1.

† Ibid. lib. vi. cap. vi. sec. 2.

‡ Ibid. lib. v. cap. iv. sec. 3.

|| Ibid. lib. vii. cap. i. sec. 1.

§ Ibid. lib. vi. cap. ix. sec. 1.

** Ibid. lib. vi. cap. vii. sec. 1.

†† Ibid. lib. v. cap. iv. sec. 3.

‡‡ Ibid. lib. vi. cap. viii. sec. 4.

||| Ibid. lib. vii. cap. ii. sec. 1.

§§ On the mention of this effort of *Simon's*, to escape from the citadel of Mount Sion,

very curious fact at once explains the nature and use of those caves, and subterraneous passages, which are spoken of as being in several other *hill fortresses*; and at the same time proves, that such had been hewn out in the interior part of Mount *Sion* of old.

There is every reason to believe that *Adoni-zedek* dwelt in this very hill fortress, at the time when Joshua and the Israelites passed over Jordan.² And it is more than probable (notwithstanding the objection of Bochart, and of some other commentators, who apprehended Josephus to be speaking of the *Temple* at Jerusalem, instead of the Fortress) that the very first establishment of *Mount Sion* as a place of residence, might be, as Josephus plainly intimates, even so early as by the great and venerable person called *Melchizedek*, king of

by means of mining; I cannot forbear observing, that such art seems to have been, from the earliest ages, known to the Jews; and was made use of by them, in a most remarkable manner, on many occasions, during their last war with the Romans.

We are told,³ that when they dared not to come to a plain open battle with the Romans, which was certain death; yet, through their mines underground, they would appear in the midst of them on a sudden.

And when the Jews were provoking and bringing on the war, one *Manahem*, the son of Judas the Galilean, and a leader of the seditious, not being able to attack Jerusalem by a regular siege, caused a mine to be dug, from a great distance, and carried under one of the towers; where they left the tower supported only by wooden props; they then set fire to these wooden props, and foundations, that supported the rest; and in consequence of this, the tower fell down suddenly.⁴

Again; when the Romans were attacking the tower of *Antonia*, after they had raised four great banks, or mounds, to carry on their operations; and when their great engines of attack were brought upon them; *John* (the other great leader of the seditious, beside *Simon*) had, from within, undermined the space that was over against the tower of *Antonia*, as far as the banks themselves; and had supported the ground over the mine, with beams laid across one another. Then he ordered such materials to be brought in as were daubed over with pitch and bitumen; and set them on fire. And as the cross beams that supported the banks underneath were burning, § the banks (or mounds) were shaken down, and fell into the adjacent ditch with a prodigious noise. At first there arose a very thick smoke and dust, as the fire was choked with the fall of the bank; but as the suffocated materials were gradually consumed, a plain flame broke out. On which sudden appearance, a consternation fell upon the Romans; and the shrewdness of the contrivance discouraged them.

* Joshua, chap. x. ver. 1.

† Josephus de Bello Jud. lib. i. cap. xviii. sec. 1. ‡ Ibid. lib. ii. cap. xvii. sec. 3.

§ Ibid. lib. v. cap. xi. sec. 4.

Salem, * who was probably neither more nor less than the patriarch *Shem*.† And that it afterwards fell into the hands of the Jebusites; who probably were the remains of the very shepherds that were driven out of Egypt, and mistaken by Manetho for the Israelites.‡

Other hill fortresses, in the land of Canaan, are described as being nearly of the same age. For Josephus tells us, || that Hebron was a more ancient city even than Memphis in Egypt. And we read, in the book of Numbers, that it was built seven years before *Zgan*.§ It was before the days of Joshua called *Kirjath Arba*, or the city of *Arba*, the father of *Anak*,** and was the residence of the celebrated giants.

The vale of Hebron where Abraham, and Isaac, and Jacob, originally dwelt, was at its foot, and nigh unto it; ++ as was also the cave where Sarah was buried. ††

And it was, as a place of the greatest strength of any in the country, the fortress where king David went to reside, before he had the opportunity of residing in Mount Zion. |||

It was the place also to which Absalom resorted, when he rebelled, and set himself up to reign instead of his father. §§ And was afterwards rebuilt, and strengthened with additional fortifications, by *Rehoboam*.***

And whilst we mention these hill fortresses, in the land of Canaan, there is, with regard to them, one very remarkable passage in Sacred Writ, where the translation in the Septuagint flings the greatest light (as it does in several other instances) upon descriptions, which as they stand in our present English translation, though it be so exact and excellent in all more material points, yet are almost quite unintelligible.

* Josephus de Bello Jud. lib. vi. cap. x. sec. 1. † The fine situation of this city of David, Mount Zion, is most admirably well represented in a curious drawing, on a large scale, by Mr. *Miers*, which is in the possession of Sir Robert Ainslie.

‡ See a passage in Josephus against Apion, which may best be explained on this supposition, lib. i. sec. 26. || De Bello Jud. lib. iv. cap. ix. sec. 7.

§ Numbers, chap. xiii. ver. 22.

** Joshua, chap. xv. ver. 15.

++ Genesis, chap. xxxvii. ver. 14. †† Ibid. chap. xxiii. ver. 2, 17. chap. xxxv. ver. 27.

||| 2 Samuel, chap. ii. ver. 1.

§§ Ibid. chap. xv. ver. 10.

*** 2 Chronicles, chap. xi. ver. 10.

The passage referred to is in the Book of Joshua ;* wherein we read what no one can possibly understand, as it is there translated ; as follows :

But as for the cities THAT STOOD STILL IN THEIR STRENGTH, Israel burned none of them, save Hazor only ; that did Joshua burn.

In the margin of our Bibles, indeed, the reading is somewhat amended by substituting the words, *the cities that stood on their heap* : Even this expression, however, is still difficult to be comprehended. But, in the Septuagint, the whole is fully explained. For there the words are,

τὰς πόλεις τὰς κεχωματισμένας,

that is, *the cities that were built, or situated, on pointed hills, or on mounts ;* which expression clearly conveys to our minds the idea of these very kinds of aboriginal hill fortresses, which we have been describing.

Those who duly consider how closely mankind resemble each other, in manners and customs, in the first dawns of society, and in the beginning and origin of all nations ; and even afterwards during their continuance in any degree in an uncivilized state ; and how curious it is to trace the similarity of usages, and resources for the defence and convenience of life, from the parts of the earth first inhabited, and which first made approaches towards civilization, down to those latest cultivated ; will perceive the necessity of these digressions, in the outset of these observations, on the interesting Military remains of antiquity in Great Britain.

In truth, the original idea even of any city at all, amongst the primæval Celtes, seems, in all regions of the world, to have implied nothing more than a mere *Circumvallation*, for the security of an assemblage of huts, or tents, or dwellings of any kind : and did not necessarily carry with it the intimation of the existence even of a tower ; and much less of any regular house, or palace.

And hence we may easily account for the vast number of cities, which are by Homer, and in the most antient histories, mentioned to have been built by mere *emigrants* ; and finished in so very short a space of time.

Hence also we may very easily account for what is said in the

* Chap. xi. ver. 13.

Mosaic writings, of Cain's having built *a city*; under such strange circumstances as attended him.*

And hence also we may perceive, why such particular notice is taken, when a town, or city, really had the addition of a Tower; as in the case of *Thebez*.†

After having thus endeavoured to form a clear idea of the nature of the fortresses, and of the mode of habitation of the antient Britons; we cannot but wish to obtain, as far as is possible, some little conception of the appearance of their persons, and of their manners.

Cæsar says, the inhabitants of Kent were the most civilized of any; and the most nearly resembled the natives of Gaul. For the inhabitants of the interior parts of the island, according to his account, ‡ were so utterly unacquainted with the conveniences of life, that they did not even sow any corn at all, but lived entirely upon milk, and flesh.

All the Britons painted themselves more or less (*vitro*) that is, according to the apprehensions of the best commentators, with *woad*, of a bluish colour, in order to render themselves of a more formidable appearance in battle. And *Herodian* affirms, that some of them, || on the sea coast, *punctured* their bodies (*σικκωνισαι*) with figures resembling various kinds of animals; in consequence of which they also went without garments, that they might not cover or conceal those indented representations; which we may observe must have been very nearly of the same kind, as to the manner in which they were impressed, with the marks made by *tattooing* in the South Sea Islands.

They had long lank hair; but were shorn in every part of the body, except the head, and *upper* lip. And excepting the persons just mentioned, they were, *in general*, clad with skins.

To this, which is the substance of the account given by Cæsar, Strabo adds, § that many of the inhabitants were so rude, and un-

* Genesis, chap. iv. ver. 17.

† Judges, chap. ix. ver. 50, 51.

‡ De Bello Gallico, lib. v. sec. 10.

|| Herodian, lib. iii. sec. 47. Solinus,

lib. xxxv. Cæsar de Bello Gallico, lib. v. sec. 14. Plinii Hist. Nat. lib. xxii. cap. 1.

§ Strabo, lib. iv. p. 200. Par. ed.

skilful, as neither to be able to make any cheeses, although they had plenty of milk ; nor to cultivate *pot herbs* ; or to use any kind of tillage of the ground whatever.

Their wretched black substitute for salt also, was obtained merely by pouring sea water on the embers of burning wood.* And with this they, or at least the neighbouring Irish, are said, in some instances, to have devoured human flesh, † and to have drank the blood of animals, and even of their enemies. ‡ And it must be confessed, that the barbarity and horrid customs of some barbarous nations, lately discovered, render these accounts too probable, however questionable the authority of the authors who relate them may be.

But though there were such instances of barbarity in some parts, yet this wretched savage state was not universal : and with regard to their Druids, we may infer, from Strabo's account of those in Gaul, whom they so nearly resembled, that this order of men were even richly clad ; and that some of them even wore golden chains, or collars, about their necks and arms ; and had their garments dyed with various colours, and adorned with gold. §

Chains also, both of iron, and gold, appear to have been worn by some of the chieftains, and noble personages. §

And from his account of the common people in Gaul, and of the intercourse the Britons had with them, and of the close similarity of their customs, ** we may conclude that some of the common order of Britons, instead of the rude skins of beasts, wore very thick coarse wrappers made of wool ; which must plainly have been a sort of blankets, or rugs, fastened about the neck with a little sharp pointed piece of stick. They wore also a coarse slit short vest, reaching down barely to the thighs, with sleeves. †† Whilst, for weapons, and armour, they had a long two-handed sword, hanging

* Taciti Annales, lib. xiii. cap. 57 ; Plinii Hist. Nat. lib. xiii. cap. 7 ; Varro de Re Rustica, lib. i. cap. 8. † Strabo, lib. iv. 198—p. 302 ; Diodorus Siculus, lib. v. cap. 32. 214—p. 355.

‡ Solinus, cap. 35. p. 166. ed. Basil.

§ Strabo, lib. iv. 197—p. 302.

§ Taciti Annales, lib. xii. cap. 36 ; He-

rodian, lib. iii. cap. 47 ; Polyb. lib. iii. ** Cæsar de Bello Gallico, lib. v. sec. 12 ; Tacitus Vita Agric. cap. 11.

†† Strabo, lib. iv. p. 196—300 ; Cæsar de Bello Gallico, lib. v. cap. 14.

by a chain, *on the right hand side*; a great long wooden shield,* as tall as a man; long spears; and a sort of missile wooden instrument like a javelin, longer than an arrow, which they darted merely by the hand; (both of which latter, seem plainly to denote two different sorts of those kind of weapons, called *Celtes*, fixed at the end of staves and sticks) and some of them used slings for stones. There were amongst them also those who had breastplates made of plates of iron, with hooks, or with wreathed chains; and such as had helmets also of different fashions: but some went into the field of battle nearly quite naked,† who probably were *those* mentioned by Herodian, whose bodies were punctured with figures resembling various animals: and who had sometimes wreathed chains of iron about their necks and loins.‡

They generally lay and reposed themselves, on the bare ground; yet most of them ate their food sitting on seats.

And they had a particular species of dogs, most excellent for hunting; and so fierce, that the Gauls made use of them in war. ||

From these accounts compared together, and duly weighed, we may venture to represent to our imaginations some tolerably adequate idea of the appearance which the antient Britons must have made.

And, in order to convey such whole complex representation in the readiest mode to others, just as it presents itself to my own mind, I shall venture to add, in Pl. ⁱⁱⁱ, a group of figures, which (as

* Strabo, lib. iv. 196—p. 301; Diodorus, lib. v. p. 213—353; Tacitus de Moribus Germanorum, cap. 17; Clur. Germ. Antiq. lib. i. cap. 16; Pelloutier Hist. Cel. lib. i. p. 301. These rude rugs, or blankets, thus pinned about the shoulders, were manifestly the old aboriginal patterns of dress, from whence, in more refined times was derived the *plaid*, afterwards fastened with the rich embossed broach, so well known to our modern antiquaries. As to the vest, it was clearly seldom used by the common people, and appears to have been the better sort of cloathing; it had at first sleeves covering only the arms, but afterwards they were made reaching down to the wrists. Strabo, lib. iv. 196—p. 300; Diodorus Siculus, lib. v. cap. 30. 213—p. 353; Tacitus de Moribus Germanorum, cap. 17; Clurvis German Antiq. p. 114. We have reason to believe also, that these rude garments which covered them in the day, were the only covering they had in the night. (See Clur. Germ. Antiq. p. 119.) Which circumstance is the more credible, when we reflect that the polite nations of Asia, as described by Homer, had frequently no other resource to secure them from the inclemency of the night air.

‡ Diodorus, lib. v. 213—p. 353.

§ Herodian, lib. iii. sec. 47.

|| Strabo, lib. iv. 199. Par. ed. p. 305. Amst.

they will appear with more meaning and animation, when supposed to be engaged in some transaction, than if they were drawn singly and unemployed) are arranged, in a manner descriptive of a celebrated scene in the *Caractacus* of our excellent poet Mason.

Elidurus, and Velinus, are represented as brought by the British attendant soldiers into the presence of Caractacus, who was, at that time, concealed in the sacred recesses of the Druids; and just at the instant when he was about to consult their *Vates*, and they were preparing to begin some of their most solemn rites and ceremonies. Caractacus is represented as standing in the midst, dressed according to the preceding descriptions of the garb of the more civilized Britons; and before him are Elidurus, and Velinus in a garb of the same kind. The soldiers are one of them clad with skins, as was usual amongst the inferior classes; and one of them has the long broad sword; and another the sling; they have also the long shields so particularly mentioned; and one of them appears quite naked, and tattooed; according to Herodian's description. Near them also is placed a large dog, that the circumstance of their making use of such in battle may not be forgotten. The idea of the dress of the chief Druid is made to conform, as much as possible, to that of the figure given by Rowland; and in the dresses and garments of the others, in conformity to the description given by Strabo, some of their mantles are represented as striped, and of various colours; and they have golden chains, and chains of beads, on their necks and arms. One of them also has the golden hook, for cutting the misletoe: and the wand, or rod also; and the Welsh harp are introduced; consistently with what is said of their having been unquestionably in use in this most early period; when no ceremonies of divination could be performed without the one; nor any religious worship without the other.

The golden hook, however, is here represented, according to the usual idea, as a flat sort of curved sickle; but whether that is perfectly right, there have been some doubts: both because the misletoe might perhaps better be *torn* down, with an hooked instrument; than *cut* down. And because, about the year 1795, in Cornwall, there was actually dug up from the depth of sixty feet below the surface, in searching for a new tin mine, between Fowey and Lost-

withiel, a curious long slender hook of hard metal, covered with a substance resembling gold, and chased, in part, like a snake's skin; and having a regular handle; at the end of which a fine piece of amber was well set: which pointed hook, if it might be deemed strong enough, seemed well adapted to the tearing and pulling down of misletoe from the oak. This instrument, which is in the possession of Philip Rashleigh, Esq. on whose estate it was discovered, is above a foot in length. And, whilst the great depth at which it was found buried, shews its high antiquity; the niceness of the workmanship of its coated ornament, and of the setting of the amber, shews it must have been an instrument of great importance: and a little round eye, or loop, just below the handle, shewed that it was worn as a badge of dignity. Its form is represented of the real size, Pl. $\frac{III}{4}$.* But it ought to be mentioned, that some doubts have been entertained of the sufficiency of its strength, as well as of its having been once straight; and of its having been either a divining rod; or even a mere pin for a garment. To degrade it to the latter use, however, it must be considered, notwithstanding its good workmanship, as a very awkward ill contrived implement; which we can hardly suppose a thing of such nice and elegant construction, to have ever been.

Leaving therefore its precise use undetermined; but being assured it was a British instrument of some sort, (very possibly to assist in the inspection of the intestines of sacrificed victims,) we will go on with the explanation of the Plate.

In the landscape behind the figures appears, in front, the Druid Oak; with misletoe growing upon it: not far off stands a *Cromlech*, or altar: on one side, at a distance, is seen a Druidical circle, with huts or cells of the Druids near adjoining: and on the other side at a greater distance in the perspective, and as it were through a long drawn glade, or vista, is seen a *rocking stone* on an hill.

The learned Sammes, in his *Britannia*, has given us the representation of a Druid, p. 101, from some antient statues dug up at

* Since this drawing was made, another has also been taken, and engraved in the *Archæologia*, Vol. XII. p. 414, Pl. LI. fig. 8; but yet this is here inserted because it is rather more exact, and in better proportion; as I am well able to ascertain, from having had the instrument some time in my custody.



Del. G. Kneller

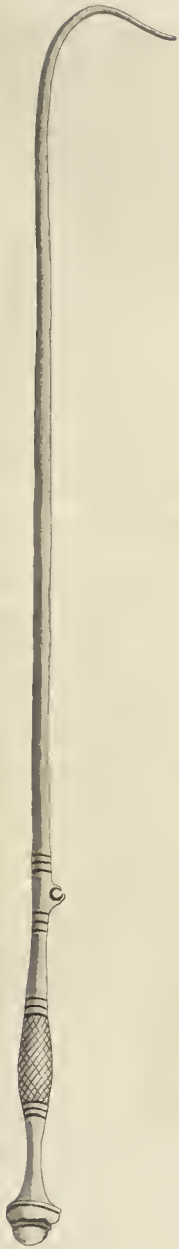
Engraved by G. Kneller

(C) *Scenes & Habits of the Ancient Egyptians.*

Published by G. Kneller, 1801

25





Wichelberg in Germany: and the same idea of their appearance seems to have been followed by Rowland in his *Mona Antiqua*.* But as some doubts may arise, concerning the supposition of these Statues having been properly the representation of *British, or Gaulish Druids*; because of the place where they were found: so it has been remarked by the celebrated *Selden*,+ that the garb and representation does not, in all points, agree with what is described by *Cæsar*, and *Strabo*, concerning their golden ornaments; dyed garments; bracelets; and the mode of shaving of the generality of the Britons: and therefore I have ventured to make such deviations, as are consistent with the accounts of antient authors.

Sammes also gives us ‡ a representation of an inhabitant of the *Scyllies*; whose garments were black, and longer than those of the other Britons: but neither the form of the garment, nor the appearance of the hair, seem justly to agree with the description of *Diodorus*. And still much less authority is there for his representation of *Queen Boadicea*.|| These therefore are not attempted to be here copied.

Having in the preceding description represented the long wooden shield so particularly, amongst other accoutrements of the British soldiers, I cannot forbear to observe, that although no such usage can be presumed to have taken place amongst the more rude Britons; yet that even in *their* time, and age, the use of *armorial bearings* seems clearly to have been introduced amongst the *Gauls*.

For *Diodorus*, describing the long shields of the *Gauls*, which we have just referred to, says, they were *πεποικιλμένοις ἰδιόχρωμας*, varied with particular marks, or colours, properly belonging to each individual person.§ Which perfectly accords with what *Tacitus* says, concerning the *Germans*: that they distinguished their shields with the most nicely chosen colours. “*Scuta tantum lectissimis coloribus distinguunt*.”** Who at the same time mentions the disgrace of losing these shields, in nearly the same terms that a *Norman Knight* would afterwards have spoken concerning the reversal, or breaking, of the coat armorial, as a punishment for dishonourable military conduct.

* Page 65. † *Janus Angl. lib. i. p. 52.* ‡ In his *Britannia*, p. 117.

|| Page 229. § *Diodorus, lib. v. 213—p. 355.*

** *Tacitus de Moribus Germanorum, sc. vi.*

“ *Scutum reliquisse, præcipuum flagitium: nec aut sacris adesse, aut concilium inire, ignominioso fas: multique superstites bellorum, infamiam laqueo finiunt.*”

On a little reflection it plainly appears, that as there are no more than seven colours, besides white, and black; and no great number of clearly distinct shades formed by the composition of them; the numerous families, or tribes, of the Gauls, and Germans, could not well be distinguished by colours alone, without the addition of *various forms, and figures*. And if various forms and figures were added; we have then the very essence of *armorial bearings*, in the strictest sense of the words; and may plainly perceive, that *coats of arms* were actually used, both by Gauls, and Saxons; and, as well as the ground work of our laws, and constitution, were brought from the forests of the north. We may perceive also, that the tradition concerning the *Saxon* standard of the *White Horse*, the memorial of which has so long been preserved in Berkshire, does by no means deserve to be considered as fabulous. Whilst unquestionably, the common opinion concerning the use of *armorial bearings* having been *first* introduced in the time of the *Croisades*, to distinguish the Chieftains, and their followers, in battle, seems, on other accounts, to be without any good foundation: as we can hardly conceive why such distinctions should have been then *first* thought of, or deemed at all more important in that war, rather than in long preceding expeditions, and undertakings, during the greatness of the Roman empire; when full as many different nations were often embattled on one plain.

Indeed it seems manifest, even from the sculpture on the celebrated columns of Trajan, and Antoninus at Rome, that *armorial distinctions* were, in the days of those Emperors, in full use, both amongst the Romans, and amongst many barbarous people.

For in Bartoli's fine engravings of Trajan's pillar, representing the events of the Dacian war, and of the expedition against Decabalus, we find different varieties of bearings in no less than thirty-one* different plates; besides many repetitions of the same devices, denoting persons of the same clan, or troop.

* See, besides the ornaments of the square pedestal, Pl. VIII. fig. 90. Pl. X. fig. 100, 104. Pl. XVII. fig. 132. Pl. XVIII. fig. 133, &c. Pl. XX. fig. 141. Pl. XXII.

And so also in the engravings of the Antonine pillar, representing the expedition of Marcus Aurelius against the Germans, and Sarmatians, we find great varieties of bearings, on the shields of the soldiers, and Chiefs of those nations.* From all which, a curious, and even complete idea of the state of heraldry, in those antient times, might be formed.

With regard to those bearings, however, it may be observed, that notwithstanding there appear to have been such numerous variations; yet few of the devices contained any figures of animals, or plants, or of weapons; probably on account of their little skill in drawing, and designing.

And it may deserve attention, that perhaps we have one means of tracing the use of armorial distinctions even to its very source. For amongst other most curious pieces of information which we receive from Herodotus, we are expressly told by that Father of history, † “that the *Carians* were the inventors of *three* things in use amongst the Grecians. They were the first who wore a crest upon their helmets;—the first who taught men to adorn their shields with various figures (or signs, and marks of distinction); the words are ἐπὶ τὰς ἀσπίδας τὰ σημεῖα ποιεῖσθαι, or as some copies have it, σημεῖα ποιεῖσθαι;—and the first who invented the hold (or handle) whereby shields are managed, which before used to hang only by a leathern thong going round the neck, and descending by the left shoulder.”

And this antient custom, last mentioned by Herodotus, accounts for the general mode of wearing the sword on the right side, in the earliest ages. And therefore even accounts for it, amongst the Britons.

One of the long and broad two-handed swords, which there is great reason to think actually belonged to a British Chief, who resided in the neighbourhood, and was buried on the spot, was dug up

Pl. XXIII. Pl. XXV. Pl. XXVI. Pl. XXVIII. Pl. XXX. Pl. XXXI.
Pl. XXXII. Pl. XLII. Pl. L. Pl. LII. Pl. LIII. Pl. LV. Pl. LVI. Pl. LVIII.
Pl. LXVIII. Pl. LXXI. Pl. LXXII. Pl. LXXIII. Pl. LXXXIII. Pl. LXXXIV.
Pl. LXXXV. Pl. LXXXVII. Pl. LXXXIX. Pl. CI. Pl. CXI.

* See Pl. VI. Pl. X. Pl. XIX. Pl. XX. Pl. XXII. Pl. XXXI. Pl. XXXIV.
Pl. XXXVIII. Pl. XL. Pl. XLVI. Pl. LVII.

† Herodotus, ed. Wesselingii, 171. p. 81.

at Chateris, in the Isle of Ely, in 1757, together with a *celt*, or spear-head; the umbo of a shield; an urn; and a glass vase.*

One of these swords also was seen by Mr. Pennant, at *Talyskir*, in the Isle of *Rum*, one of the Hebrides. It was called a *Gly-more*, and had a blade two inches broad, doubly edged; and three feet seven inches in length; with an handle fourteen inches long; and a plain transverse guard, of one foot.+

And it ought not to be passed by unnoticed, that such an one appears to be represented in the ancient figure of a soldier, that was found amongst the ruins of London, in digging after the great fire in 1666.‡ And that this figure had the hair flowing; the legs bare; the lower garment short, and fastened by a girdle round the waist; and the upper garment flung carelessly over the breast and one arm.

A great broad sword of the same kind also, near five feet long, with a transverse guard, ornamented with inlaid silver foliage; was found in a barrow at *Aspatria*, about twenty miles from *Carlisle*, in the road to *Cockermouth*, in the year 1789.||

The *Celts*, which so constantly formed a part of the armour of the ancient Britons and Gauls; and which have been so particularly taken notice of by Rowland;§ and of which so very many, of various forms, have been found in different parts of this island; are all very fully described, in a very curious Memoir in the *Archaeologia*,** where their several distinct figures are shewn; from whence it plainly appears, that they must have been used for various different purposes, as well as for instruments of war; and that they were in general fastened by strings, and thongs, to their handles, much in the same manner as the implements so lately made use of by the rude natives of the South Sea islands.

And indeed some few others of stone that I have seen, (and one of which I have still in my own possession), plainly indicate, that a

* They are all represented from a drawing of Dr. Stukeley's, in the *Gentleman's Magazine* for 1766, p. 118.

† See *Voyage to the Hebrides*, p. 289. ‡ See *Montfaucon Antiq.* Vol. IV. 16. T. X.

|| An account of this is given in the *Archaeologia*, Vol. X. p. 112.

§ *Mona Antiqua*, p. 86.

** By Dr. Lort, Vol. V. p. 106.

time and state of things once existed in these countries of Europe, when the conveniences of life were quite as much limited, and the manners of the people nearly as barbarous, as those of the New Zealanders.

Some of the stone hatchets, of a later date, and of a somewhat more artificial kind than mine, are described, and represented, in the *Archaeologia*.* Whilst a flint axe, still more like that in my possession, was discovered some years ago, sticking in a vein of coal in Craig-y-Parc, in Monmouthshire:† which vein, it is remarkable, was in such a situation, as to have been accessible to the early natives of the country, without any need for mining, or digging deep.

And we may add, that stone arrow heads, are still sometimes found in Scotland, and called by the name of *Elf shots*.‡

Such also have been found in the midway, of the ascent up to the celebrated mountain of Cader Idris, in Merionethshire.§

They have been also found in other parts of Britain: and what is most remarkable, are nearly of the same construction with such as have been discovered near the Straits of Magellan, in South America. Woodward has engraved six of them:¶ and says, truly enough, they are of a form the most mischievous, and most fitted to hurt that could possibly be devised. They are brought to an exquisitely sharp point, with keen edges, and have snaggs, or as they are called beards on each side, on purpose that they may make a large wound wherever they enter; and may not be drawn out without much difficulty, and harm to the part which they happen to have penetrated.

Diodorus expressly tells us** the Gauls wore brazen helmets; having either horns affixed to them; or so contrived as to represent the faces of birds, or beasts. And we may therefore, from the close similarity of the customs of the two nations, conclude very fairly, that such were sometimes in use amongst the Britons. But as they are no further particularly described; and as no remains of any such have ever been dug up; I have not ventured to insert, amongst the

* Vol. II. p. 118. 124. Pl. VIII. fig. 1 and 2. † See Philosophical Transactions, No. 335. p. 500.

‡ See Pennant's Tour in Scotland, p. 102.

§ See Gough's Additions to Camden, Vol. II. p. 541; and Wyndham's Tour, p. 107.

¶ See Woodward's Fossils, octavo, p. 43.

** Lib. v. 215. p. 353.

figures of the annexed plate, any sort of representation of their form.*

Strabo had himself seen some of the antient Britons at Rome; and he took particular notice of a circumstance not mentioned by other writers; of their being remarkably tall.†

He describes also, on that occasion, their peculiar custom of using in their own country, *a vast number of Cars*, or Chariots ‡ in their wars: which is confirmed by Cæsar's account; who says, that Cassivelaunus had no less than four thousand about his person.§

But, truly, from the exceeding rudeness of the British dwellings, and also from the savageness of their manners, as we find them described by Strabo; and further, from their having not a few merely, but such *a vast multitude* of cars; we may easily conceive, that these, as well as their dwellings, were of no great magnitude; nor of any very curious workmanship.

They most probably (if we may be allowed to investigate facts, without preconceived prejudices) may even be deemed to have resembled the modern, little, low built, Welch carts; the common use of which, in these present days, seems to have been derived down, merely as a simple, plain imitation, of the general form of their most antient vehicles.

And it is surely a striking fact, that the present modern Welch, are no less remarkable for using a vast, unnecessary, and quite disproportionate number of carts, or cars, on many occasions, than their ancestors were.

* There is a curious passage in Herodotus, lib. iv. p. 360, wherein he affirms, that the Greeks first borrowed *the helmet* from the Egyptians: and it seems very probable, that the figures of men with the heads of birds, and beasts, so often seen amongst the Egyptian hieroglyphics, and which have been commonly imagined to represent some of their false deities, were designed, in reality, originally to represent men armed with antient helmets. The fabulous tale also of men whose mouths were in their breasts, might be derived from the appearance of barbarians armed with large casques. And the first barbarous idea of this sort of armour, may very easily be conceived to have been to strike beholders with horror, and amazement; as well as to defend the head from blows. And hence probably this custom might be derived to the Britons; who by some historians are said to have *shaped their bodies into divers figures*. Sammes's Britannia, p. 124.

† This distinction is perhaps still remarkable, with regard to the inhabitants of this island, when compared with the Spaniards. ‡ Strabo, lib. iv. 200. p. 305, 306.

§ Cæsar de Bello Gallico, lib. v. c. 15.

I myself have seen, near Penrice, in Glamorganshire, a farmer, carrying home a part of his harvest, by means of a procession of twelve little carts; each drawn by one horse; with a man, or a woman, riding astride upon it; and followed by a train of twelve single horses; each having a man, or a woman, riding in like manner, and carrying behind them merely two or three sheaves of corn, tied up in bags; whilst the whole convoy, all together, though consisting of twenty-four riders, twenty-four horses, and twelve carts, did not carry home more corn than would have been a load for an English waggon; nor perhaps so much.

That the resemblance between the antient British cars, and the modern Welch, little, low built carts, is not founded on idle conjecture, will plainly appear, if we fairly allow ourselves to consider, that no sort of carriage, of any kind of construction that can be conceived, can better, or indeed by any means so well agree with Cæsar's description of the manner in which they were used in battle: *running quickly here and there in every part, over the most uneven ground, without being overturned*; and then, when the warrior had descended from them to fight on foot, *affording him an easy opportunity to ascend again in a moment.*

“ This,” says Cæsar, “ is the mode of fighting from their cars: first they drive about through all parts, and cast their weapons; and by the very terror of the horses, and noise of the wheels, much disturb the enemies' ranks. And when by this means they have forced their way into the midst of the enemies' cavalry, they jump from their cars, and fight on foot; the drivers in the mean while removing a little out of the heat of the battle, and placing themselves in such a manner, that if those who are fighting, are hard prest, by the multitude of the enemy, they may make an expeditious retreat to their cars. Thus they have both the rapidity of cavalry, and the stability of infantry in their fights. And they have acquired such skill, by daily use and exercise, that they are accustomed, even in a steep and precipitous spot, to keep their horses on full speed; and to stop or turn them in a moment; to run (*i. e. themselves*) upon the *shaft (or pole)*; to stand upon the yoke; and from thence quickly to betake themselves to the car again.”*

* Cæsar de Bello Gallico, lib. iv. §. 29.

From the mode of expression, and mention that is made of British Cars, in many detached passages of the most antient, and most curious historians,* we may conclude, that the Britons had six kinds of chariots, distinguished by different names; but all very small. And it is much deserving of our attention, that these names are allowed to be derived from the East, and from the Phœnicians; † the *Benna*; the *Carrum*; the *Covinus*; the *Essedum*; the *Rheda*; and that a carriage is still called by some of the Germans *Benne*; and that to this day, to carry in a cart, or waggon, is in the old British tongue called *Cowain*.

The *Covinus* seems, however, to have been, properly, the *Car*, armed with scyths, or hooks, in imitation of the antient iron chariots of the Syrians; whilst the *Essedum* was that to carry armed men; and the *Rheda*, that of the chieftain; and the *Benna*, and the *Carrum*, seem to have been left to carry single private men, or baggage. But in none of them can we conceive, that there was much difference of form; because if there had been so, they could not have run so rapidly over uneven ground, without overturning. Nothing except such low built cars as those of the modern Welch could endure that: and therefore we may be well assured, that the figures given by Mr. Sammes, ‡ must be erroneous; for any one who casts an eye upon them, must perceive, that such carriages would overturn even sooner than a modern cart.

As to the *Scyths* also, I should suspect, that both in the British, and in the Syrian chariots, they were fixed, at the ends of the axletrees, as well as on the sides of the shafts, not sticking out straight; nor with the inner side of the curved part forwards; but rather sloping backwards, and with the edge formed on the outer convex part; by which means they would cut slanting, as well as merely strike.

The warriors who fought in these war chariots, we find, from Cæsar, § were clad in skins; were stained with woad of a bluish colour, to make them appear more dreadful in battle; had their

* Cæsar, Diodorus, Strabo, Lucan, Tacitus, Pomponius Mela, Dio Nicæus. See also a citation from the poet Juvenal, with judicious remarks in the *Archæologia*, Vol. VII. p. 211; and it ought not to be forgotten, that Dio Nicæus describes the horses as being small; as are the true Welch horses.

† Sammes's *Britannia*, p. 120, 121.

‡ See the plate in Sammes's *Britannia*, p. 122.

§ *Lib. v. sec. 10.*

hair lank ; and were shaved in every part of the body, except the head, and upper lip.

And there is the greatest reason to believe, that like the savage South Sea Islanders, described by *Cook*,* they preserved the jaw-bones of their enemies slain by them, as memorials of their exploits, and valour.

For Strabo says,† of the Gauls, (who, he tells us, were even more civilized than the Britons,) but yet resembled them in most points, “ that when they return from battle, they carry the *heads* of their enemies suspended from their horses necks; and then place them openly before the gates of their towns, as a sort of trophies. And anointing some of them also with pitch or turpentine, they preserve them in chests, or baskets; and shew them with ostentation to strangers; refusing to suffer them to be redeemed even for their weight in gold.” Which account is confirmed by Diodorus.

And it is very remarkable, that immediately after his account of the Britons, whom he had seen at Rome;‡ describing the still more savage state of the Irish, Strabo says, *that they eat human flesh*. Which circumstance he mentions with just the same kind of timid caution, as some of our early geographers did the first reports concerning the Carribee Indians; before the later voyagers had put the existence of Cannibals past all doubt, both in the Carribee Isles, and in New Zealand, and in the Islands of the South Sea.

The weapons which the British warriors used, when mounted on their Cars, were most manifestly those called *Celts*, of various kinds: which must have been tied at the end of sticks, and staves; in a mode not at all surpassing, and most likely much resembling, the weapons of the New Zealanders.

The manner in which very remote nations, in their early periods, resemble each other, is a most striking circumstance in history. And the numerous Cars of the Britons, unavoidably remind us of the *nine hundred chariots* of iron, of Jabin king of Canaan. || Nine hundred *Chariots*, that most probably were not of much greater magnitude, or magnificence, than a British Car.

* Hawkesworth's Voyages, Vol. II. p. 169. See also, a strange fact, Vol. III. p. 469.

† Lib. iii. 198. p. 302, and 200, p. 305. See also Diodorus Siculus, lib. v. 212, p. 552. Ed. Wesselingii. ‡ Strabo, lib. iv. 201. p. 307. || Judges, chap. iv. ver. 31.

They remind us also, of the *Cars* of the antient Grecians, and Trojans; which seem to have been, when all that is related concerning them is duly considered, (like those of the Britons,) of a much more simple construction, than the usual prejudices of education, and the too great reverence we are so apt to entertain for objects of high antiquity will, at first sight, readily permit us to allow.

Homer himself may be our guide, to open our eyes, in this respect; whether his admirable work be really an exact narration; or merely a romantic Epic poem. For in either case we may be assured, that he accurately described well known usages, and customs. And, according to his account, in the first place, we find, the Grecian Cars were hardly less numerous than those of the Britons: since, when Achilles wished to pay honours to the remains of Patroclus, we are led to understand, that almost every one, (if not precisely every one,) of the Myrmidons, had his own Car to make use of on the occasion.*

And in the next place, we find a circumstance strongly marking the simplicity of the Trojan Cars. For the poet+ describing Lycaon, the son of King Priam, as having been taken prisoner by Achilles; says it was at the very time, that he (not suspecting the approach of any enemy,) was lopping young green branches from a tree, to repair a part of his chariot. The Greek expression, *ἠ' ἀγυζῆτος ἀντορῆς εἶεν*, implies, *that curved, projecting part*, of the front of a chariot, ‡ where the reins are hung, when the car is standing still: but Pope translates it coarsely enough; and in a manner that would convey a still more degrading idea of the carriage; telling us, that Lycaon was

“ But late made captive in his father’s land,
 “ (As from a sycamore, his sounding steel
 “ Lopp’d the green arms, to spoke a chariot wheel.)”

And after this; from the description given of the Chariot of Priam || himself, we find reason to conclude, even *that* Royal Car

* Iliad, book xxiii. line 6, 7.

+ Ibid. book xxi. line 37, 38.

‡ See H. Stephens’s Thes. p. 469, 470.

|| Ibid. book xxiv. line 265 to 235.

to have been merely of a very simple construction; notwithstanding what is said of its beam being made of box wood, and nicely polished. As Homer speaks of the fastening upon it, the baskets, for holding the gifts, to be carried to Achilles, in a manner that shews its structure, and magnitude, to have been not vastly superior to that of a Welch Car.

It is plain also, that Priam's chariot had only two wheels; because the chariot or waggon, with *four wheels*, which was to bring back the body of Hector, is by *that very circumstance*,* distinguished from the one in which Priam rode.

The primæval simplicity of the times also, as well as that of the Car, is in a most striking manner pointed out, by the poet's telling us, that King Priam, with his own hands, assisted only by his herald, harnessed the horses; and that afterwards he himself drove the carriage.

And we find no less simplicity of manners, and of the construction of an antient Grecian Car, in the account given, in the *Odyssey*, of the Royal Car of Alcinous, king of Phæacia, which his daughter Nausicaa requested † leave to borrow, that she might convey the robes of the family, that were wanting cleansing, to the river side, to be washed. In these our days of modern refinement, it is almost impossible to preserve the description free from *burlesque ideas*; notwithstanding the dignity of Homer's expressions. And still less, when the request of the *Princess*, begins with the Greek words *Πάτερ ἄνδρ' ἄγαθ' ἄναξ*; *Dear Papa*.

We are then told, the car was loaded with the whole wardrobe of the family; and that the *Princess*, mounting the seat, took the reins, and whip, into her own hands, and whipped, and drove the horses along. Whilst at the same time most particular care is taken to inform us, ‡ that the carriage moved but very slowly; both on account of its heavy load; and that the damsels, who attended on foot, might the more easily follow it. ||

These facts, and this little digression, may tend to assist us in forming more precise ideas, both of the simple construction of the

* *Iliad*, book xxiv. line 324, 326.

† *Odyssey*, book vi. line 57, 58, 59.

‡ *Odyssey*, book vi. line 81, 82.

|| *Ibid.* line 319, 320.

Grecian Cars, notwithstanding the high-sounding words in which they are often described; and of the antient *British Chariots*, notwithstanding they were sometimes so formidable to the Romans.* We may however fairly allow, both the one and the other to have been frequently much ornamented, and, like the Canoes of the South Sea Islanders, to have been inlaid with pearly shells, and bone; or ivory; or even with gold, and silver.

Ideas of ostentation have ever been prevalent in the human mind; and even still more amongst barbarians, as far as their abilities reached, than amongst more civilized nations.

* In a Vignette, beneath, is added a sketch of one of the little modern Welch Carts; and also a distant view of two others of them without wheels, which kind are much in use. And on one side of the same Vignette, is represented, a modern Welch Pig-stie; several of which sort are to be seen near Llandaff. They are built of small stones, and being whitened over, make a very pretty, neat appearance. And, ludicrous as the comparison may at first sight be deemed, there is certainly reason to conclude, that their form has been derived down, from an imitation of the antient British huts; as that of the carts, is from a resemblance of the antient British car.



CHAPTER II.

CONCERNING STONES OF MEMORIAL.

THE objects of British Antiquity that next demand our attention, as being coæval with the Fortifications just described; are Druidical Remains; Civil; Religious; and Superstitious.

But it is odd enough to be obliged to observe, in the very first instance, that although so very many of these remains do now go promiscuously under the name of *Druid Temples*; yet, in reality, the Druids had no Temples at all,* that could properly be so called; and by the very principles of their religion, disowned the use of any, as much as the antient Persians did.

The objects of antiquity now to be considered, are therefore simply confined, to plain Stones of Memorial; Circles of Memorial, Observance, and Observation; Sacred Circles, with Altars of Oblation; Altars for Sacrifice, and Divination; Rocking Stones; Kistvaens, or Tombs; and Barrows.

Many different specimens of which kinds, remaining in various parts on British ground, plainly speak for themselves: and are all of them obviously derived from the common usages of the most early ages of the world.

And the considering them in this light; and attending to them as connected with *such* usages; will, it is trusted, be more satisfactory, than labouring to connect their history with that of *any particular British, or Saxon, or Danish battles*; with regard to which precise events it is, after all, by far most probable they had no connection whatever.

Nothing can be more certain, than that the setting up of Stones of Memorial, was one of the very first means devised in the world,

* This is, in reality, confirmed by what Borlase fairly acknowledges, (p. 111.) and by the substance of what has been written by the most judicious Investigators of these kind of antiquities, notwithstanding their inadvertent use of the word *Temple*.

to record events, and facts of high import. And the really interesting part of the present inquiry, is merely to ascertain what kind of Stones were designed to do so.

It has on this occasion often been recollected, that when Jacob was going into Mesopotamia, to Padan-aram; and had on his way, whilst he was taking his rest at Bethel, a Divine Vision, in a dream; that in memory of it, when he awoke in the morning, he set up a Stone for a *Pillar of memorial*; anointing it with oil.

But the circumstances of this fact have not, perhaps, been so properly and rightly attended to, as they deserve. For, in the first place, our version in the Bible has very strangely translated the narration; saying, *that he took of the stones of that place, and put them for his pillows; and that in the morning he took the stone he had put for his pillows, and set it up for a pillar,* and poured oil upon the top of it.*

Now, to say nothing of the inconsistency of this double narration in itself, as to the confusion of the singular, and plural number; what sort of pillow must it have been that was formed of several stones, one of which alone was large enough to be set up for a pillar of memorial? and how could any man living have contrived to rest, with his head on such an heap? The translation of the Septuagint, however, sets the matter right: for there we simply and plainly read, that he took a *stone*, and placed it *at his head*; obviously to fence and keep off the wind, and weather; just as travellers, to this day in the Desert, as Shaw informs us, have recourse to the shelve of a rock, for shelter; or to the loose ruins, and remains of antient arches, that formerly belonged to cisterns, constructed to preserve water.+

This stone, thus taken by Jacob, to place at his head, during the night, as a fence against the weather, might therefore easily be large enough, to set up for a pillar; and indeed must in a degree have been sufficient to answer such a purpose; if it was at all of a size sufficient to answer as a means of shelter. And such an one might also be of a bulk not too great for one man to rear: of a bulk, not exceeding that of many antient stones of memorial, such as we still find in many parts of our own country; about 3 or 4 feet high, standing

* Genesis, chap. xxviii. ver. 11, 18. + Preface to Shaw's Travels, p. ix.

single, in fields, and on heaths, and by the sides of roads; without the least tradition now left, when, or why, or by whom, they were so placed: yet so appearing, and so remaining, that we may be assured, they were not so placed without some very significant reason.

Again; when Jacob was returning from Mesopotamia, and was pursued by Laban with hostile intentions; and when they were at last reconciled; and Laban proposed to make a solemn covenant, that might be for a witness between them;* we are informed, that Jacob took a stone, and set it up for a Pillar: and moreover said unto his brethren, (that is to his kinsmen, the near relations of Laban,) *gather stones: and they took stones, and made an heap: and they did eat there, upon the heap. And Laban said, this heap is a witness between me and thee this day. Behold THIS HEAP, and behold THIS PILLAR, which I have cast betwixt me and thee; this heap be witness, and this pillar be witness, that I will not pass over this heap to thee, and that thou shalt not pass over this heap and this pillar to me, for harm.*

And previous to this last solemn transaction, we find also, the first pillar set up by Jacob, mentioned, and approved of, by an Angel, in a vision, in a dream.†

We read also still further;‡ that when Jacob removed again, and fled from *Shallem*, or *Shechem*, and came again to Bethel; he reared there an altar; and seems then also to have set up *another pillar*, by the altar; and to have poured a drink offering thereon, and to have poured oil thereon.

Now these erections of pillars, in all these instances, we may be certain were not *new* devices either of Jacob's, or of Laban's; but were ceremonies observed, in conformity with more antient usages: of which all that passed in the interview, on the second occasion, was a proof. These more antient usages were therefore derived from the very first men, in the very first ages: || even from the same stock, which the first inhabitants of Britain descended from.

Accordingly we find in this country, in Cornwall, one most re-

* Genesis, chap. xxxi. verse 44, 45, 46, 51, 52. † Ibid. verse 13.

‡ Ibid. chap. xxxv. verse 7, 14, 15.

|| The analogy between the customs of the most antient nations, and those of all such others, as having been branched off, and separated from them, in very early periods of the

markable Stone, with an heap of other stones lying at its bottom ; in Boswen's Croft, Sancred, which so exactly answers to the description of that erected by Jacob and Laban, that if it were in Syria, it might even be mistaken for it.

I must borrow the representation of this stone, and heap, Pl. IV. fig. 1, from Dr. Borlase.*

And somewhat similar to this, seems to have been a great Stone, about half a mile south-west from Enston Church, in Oxfordshire, which tapers from a broad bottom, and had several stones of a much smaller size lying on the ground by it.

And as we have these remarkable appearances ; so we are not without instances of a superstitious regard being preserved for certain *heaps* of stones, as *actual bonds of covenants* ; in sequestered parts, where customs and manners are but slowly changed.

For in the Isle of Jona, one of the Western Isles of Scotland, we are told, † there are still certain stones, called *the Black Stones* ; not from their colour, for that is grey ; but from the dire effects that *tradition says* ensued upon *perjury* ; if any one became guilty of it, after swearing on these stones in the usual manner ; for an oath made on them, was decisive in all controversies.

Further, it has been particularly remarked by Rowland ; ‡ that, in many places, where there are *Carneddes*, or Heaps of Stones, of great apparent antiquity, there are generally Stone Pillars standing near by them.

To which I must add ; that, even when such kind of stones as we often see remaining alone, of great bulk, and of great antiquity,

world, have for ages been shut out from intercourse with the improvements of civilization, is in a vast variety of instances exceedingly deserving of notice.

Thus we not only find the custom of raising heaps of stones, as *Memorials*, preserved amongst the Britons, long after it was disused by the Asiatics, and by the Greeks, and become even unknown to the Romans ; but amongst the Indians, in America, we find the same custom preserved, down to our own days. For Beverley informs us, § that on concluding a peace, the Virginian Indians buried a Tomahawk, or stone hatchet, and raised an heap of stones thereon, as a Memorial.

* Antiquities of Cornwall, p. 164. Pl. X. fig. 3. † Martin's Description of the Western Islands, p. 259. ‡ Mona Antiqua, p. 51.

§ History of Virginia, p. 164.

answered the purpose only of *mere boundary Stones*; as some of them most unquestionably did: it yet seems very obvious; that their being allowed, through ages, to be decidedly *such legal marks*; was actually in consequence of some solemn covenant, and agreement, made on the spot, between the parties claiming, on both sides; of which covenant, before the use of deeds in writing, the Stone erected, was the vouched signature and proof; as much, as in the instance of the agreement between Jacob and Laban, the Stone then set up, was a proof of a Covenant of another sort.*

These kind of solemn boundaries we find mentioned in the Holy Law of God.† *Cursed be he that removeth his neighbour's Land-mark.* We find them also mentioned by Homer. For in the imaginary scene, in which he supposes Minerva to have thrown a great stone at Mars, and to have wounded him; the Poet says, that she retreating, *seized in her strong hand, a stone lying in the field, black, rough, and vast; which men in former times had placed as a boundary of cultivated land.*‡

London Stone, preserved with such reverential care through so many ages, and now having its top incased within another stone, in Cannon Street, was plainly deemed a Record of the highest antiquity, of some still more important kind; though we are at present unacquainted with the original intent and purport for which it was placed. It is fixed at present, close under the south wall of St. Swithin's Church; but was formerly a little nearer the channel, facing the same place; which seems to prove its having had some more ancient and peculiar designation, than that of having been a Roman Milliare; even if it ever were used for that purpose afterwards. It was fixed deep in the ground; and is mentioned so early as the time of Ethelstan, King of the West Saxons, without any particular reference to its having been considered as a Roman Milliare stone.¶

* One cannot but bring to mind, on this occasion, the legal ceremonies so long retained, in these later ages; of delivering a *turf of the land, or a twig upon the spot*, by way of *Livery of Seisin* of a Freehold Estate. And of holding a little rod in the hand, and of delivering it into the hands of the Steward, (by the custom of some Manors,) as a necessary form of Legal Surrender of a Copyhold Estate. See Coke Litt. fol. 48. a. and fol. 61. a.

† Deuteronomy, chap. xxxvii. verse 17. ‡ Iliad, book xxi. line 403, 404.

¶ There are some curious observations with regard to this Stone, in the Gentleman's

And so the famous Stone of Scone, formerly in Scotland; on which the Kings of England and Scotland are still crowned; though now removed to Westminster, and inclosed in a chair of wood, is yet well known to have been an antient Stone of Record, and most Solemn Designation, even long before it was first placed at Scone.

Buchanan tells us, it formerly stood in Argyleshire; and that King Kenneth, in the ninth century, transferred it from thence to Scone, and inclosed it in a wooden chair. It was believed by some, to have been that which Jacob used for a pillow, and to have travelled into Scotland, from Ireland, and from Spain. But whatever may be thought of such a Monkish tradition, it is clear enough, that before the time of Kenneth, that is, before the year 834, it had been placed simply, and plainly, as a Stone of great import, and of great notoriety, in Argyleshire; and on account of the reverence paid to it, was removed by Kenneth.*

Even under the Divine Sanction, and after the giving of the Law, we find this method of recording great events, complied with, in conformity to still more ancient usage.

For Moses expressly commanded the Children of Israel to record their entrance into the promised Land, in the following manner.

+ It shall be on the day when you shall pass over Jordan, unto the Land which the Lord thy God giveth thee, that thou shalt set thee up great Stones, and plaister them with plaister; and thou shalt write upon them all the words of this Law.

Which command we are afterwards told Joshua most punctually observed. ‡

And when he himself, just before his death, had given his last charge to the people; we are told, || *he took a great Stone, and set it*

Magazine, Vol. XLII. p. 126. See also Pennant's London, p. 4. And the Parentalia, p. 265; in which it appears, that Sir Christopher Wren, in consequence of the depth and largeness of its foundation, was convinced that it must have been some more considerable monument than a mere Milliard stone.

* It would not be just to omit mentioning, that a curious investigation of the history of this Stone, may be seen in the Gentleman's Magazine, Vol. LI. p. 452; and Vol. LII. p. 23.

+ Deuteronomy, chap. xxvii. verse 2, 3, &c.

‡ Joshua, chap. iv. ver. 8, 20. Chap. viii. ver. 30. || Ibid. chap. xxiv. ver. 26, 27.

up there under an oak, that was by the Sanctuary of the Lord in Shechem. And said unto all the people, Behold this Stone shall be a witness unto us; for it hath heard all the words of the Lord which He spake unto us: it shall be therefore a witness unto you, lest ye deny your God.

We read also of a well known, and distinguished Stone, of great magnitude; on which even the Ark of God was placed, when it returned out of the country of the Philistines, and had been taken out of the cart by the Levites. Which stone, seems to have been well known before that time, by the name of the great Stone of Abel.*

Further; when the Israelites had been in a most extraordinary manner enabled, by the directions of Samuel, on their repentance, to defeat the Philistines; and were by that means delivered from their oppression; *Samuel took a Stone, and set it between Mizpeh and Shen, and called the name of it Eben-ezer, (or the Stone of help,) saying, hitherto hath God helped us.*†

And there are some great Pillars of Stone still remaining in this country, of such vast magnitude and distinction; and standing so remote from any *circles* of Pillars, or *heaps* of Stones; that they can only be concluded to be also Memorials of great victories, and events; although all knowledge of such victories, and events, is now perished.

They are like the Pyramids of Egypt; Records of the highest antiquity, in a dead language.

Of this kind are three great stones, little known, but deserving much attention, standing near each other, in a field at Trelech, in Monmouthshire; in a manner which plainly indicates, that they did not form a part of any Circle of Stones.

They are sometimes called by the neighbouring inhabitants, *Harold's Stones*; but for what reason does not at all satisfactorily appear.

Yet, from their vast bulk; and the immense labour required to erect them, they must have been designed to perpetuate the remembrance of some event, deemed at the time of the highest importance to an whole people.

* 1 Samuel, chap. vi. verse 15, 18.

† Ibid. chap. vii. verse 12.

They are represented from a drawing, taken on the spot in 1789, in Pl. IV. fig. 2.

Their height is unequal; but the highest is at least thirteen or fourteen feet above the ground; and being most manifestly of the very same kind of substance with a stratum of rock, situated a few miles off, nearer to Monmouth, (that is, a kind of stone composed of small pebbles inclosed in an hard cementing rock, something like what is vulgarly called pudding stone,) they must have been conveyed to the spot where they now stand, by means of most prodigious efforts: efforts not inferior to those which are recorded of Harold, the son of Gormon, in the North.

For the preserving also the remembrance of some event of high import, at the time, must those stones called the *Devil's Arrows*, have been placed, near Burrowbridge, in Yorkshire. With regard to which it is very remarkable, that one of them stands leaning, nearly in the same manner as one of those at Trelch does; only they are further distant from one another. The highest is about 24 feet high. They seem never to have had a tool lifted up, or used upon them; and, in consequence of their vast antiquity, have a sort of little furrows worn in some parts, from the top downwards, by the rain.*

So those three stones, called the *Devil's Coits*, near Stanton Harcourt, in Oxfordshire, (which were all existing a very few years ago,) stood too far remote from the Rowldrich Stones, to have had any connection with them, as to their particular import: and seem to have been designed rather as mere Records, like those just mentioned. They were 65 paces asunder, and about 8 feet high, and 7 broad at the base.†

At a village also called Kinver, in Staffordshire, 9 miles from Wolverhampton, is a large single stone, 6 feet high, and 12 feet in circumference; called by the neighbouring inhabitants *Battle Stone*, or *Bolt Stone*; which there is reason to believe was set up by the

* A particular account of them in their present state, with drawings, is given in the Gentleman's Magazine, Vol. LX. p. 1081. See also Drake's History of York, p. 26. And Gough's Camden, Vol. III. p. 58.

† See some account of them in Gough's Camden, Vol. I. p. 294. And in the Description of England, Vol. VII. p. 254.

F.1

PL. IV



F.2



*Some of Memorials in Cornwall—and
Stones of Memorial at Trevis in Northmouthshire*

A. del.

J. Catwood sculp.



antient Britons, as a Memorial of a Fight, and Victory. On the top is a very rude resemblance, as some imagine, of three heads; or rather, indeed, a sort of notching, like what is seen on the top of those called the Devil's Arrows, in Yorkshire. Dr. Plott's* plain description of the Stone is; that it has two *chops* in the top of it, so that at a distance it appears a *triceps*.

In the churchyard of Leek in Staffordshire also, is a Stone adorned with exceeding rude devices, that seem to be more antient than the times of the Saxons, and Danes; and was therefore most probably one of the latest remains of this kind erected by the Britons.†

That, however, even in later ages, Stones have been actually set up as memorials of particular battles and victories, both in this Island, and in Ireland, is well known.

Thus; about three hundred yards west of New-bridge, in the county of Cork, in Ireland, are three large Stones set edgeways towards each other; the middlemost of which is five feet broad, and seven high, and two thick. And these are said, by an uncontroverted tradition, to be the Memorial of a battle fought on this spot, the plain of *Ballagh Leachta*, between *Brian Boiruma* king of Munster, and the *O Mahonies* of Carbery, assisted by the Danes, most of whom were slain.‡

And again, on the heath of Maryborough, in Queen's County, in Ireland; there is a Stone remaining, which it is affirmed was set up in consequence of a Battle fought in the *third Century*, near that spot, between the Leinster, and Munster forces.§

And in Brecknockshire, in South Wales, is a Stone still remaining, with exceeding rude sculpture; which there is the utmost reason to believe was erected to commemorate a Victory over a king of Northumberland in 617.||

So late also as the time of Malcolm, son of Kenneth, king of Scotland, a single Stone was set up in the shire of Murray,** as a Monument of a Victory over the Danes, about the year 1008.

* Plott's Staffordshire, p. 397. Gough's Camden, Vol. II. p. 381. Description of England, Vol. VIII. p. 241.

† It is represented in the Gentleman's Magazine,

Vol. L. p. 165. ‡ Gough's Camden, Vol. III. p. 505.

§ See Pl. XLIII. fig. 1. in Gough's Additions to Camden, Vol. III. and p. 545.

|| Archaeologia, Vol. I. p. 294. Vol. IV. p. 24. And Gough's Camden, Vol. III. p. 476.

** Gough's Camden, Vol. III. p. 430.

As to other Stone Pillars, besides those we have already mentioned, of a more antient date; there is a very remarkable one still standing, in the parish, or township, of Sowerby, near Halifax in Yorkshire.*

And a still more extraordinary one, in the village of *Rudston*, in the East Riding of Yorkshire; which place seems to have taken its very name from the long prior existence of this Great Pillar, reared on the spot. It is five feet ten inches in breadth; two feet three inches in thickness; and four-and-twenty feet in height, besides the part inserted deep in the ground. All the four sides are a little convex; and it tapers to a sort of point at the top.+ Every circumstance of its appearance shews it to have been British; and there seems to be no coincidence of circumstances, nor indeed any thing except vulgar prejudice, that should lead us to conceive it to be Danish.

There are also two remarkable Great Stones placed, in the form of Columns, but quite rude; in the Isle of Arran, on the coast of Scotland.‡ And one in the same Island, is said to be above fifteen feet high.§ And even many such are to be met with in various parts of the Highlands.||

In the parish of *Barvas*, in one of the Western Islands, called Lewis, or Long Island, is a very high Stone, called the *Thrushel Stone*.** And there are also three erected Stones upon the north side of *Loch Carlway*, about twelve feet high each.

There is a Stone eight feet high, and two feet thick, placed in the Isle of *Harries*, near St. Asaph's Chapel.++ And another above St. Peter's Village.‡‡

In the Orkney Islands also, are great high Stones, like obelisks.§§ And it ought not to be forgotten that near *Capel Kirig*, in Caernarvonshire, is a remarkable single upright stone called *Maen-gwyr*.|||

* See *Archaeologia*, Vol. II. p. 360.

+ There is a representation, and particular account of it, in the *Archaeologia*, Vol. V. p. 94. ‡ Voyage to the Hebrides, p. 178. § Martin's Description of the Western Isles, p. 220. || Cordiner's Antiquities of Scotland, p. 43.

** Martin's Description of the Western Isles, p. 8.

++ Ibid. Description of the Western Isles, p. 47.

‡‡ Ibid. p. 59.

§§ Wallace's Account of the Orkney Islands, p. 54. ||| Gough's Camden, Vol. II. p. 510.

As there is a most antient Stone also in Kildare county, in Ireland, called *Gablaln*, or *Gobhlan* Stone.*

And there is one most particularly noticed,† in the county of Dublin, on Broadley Common; whose high antiquity, and design, seems to be the rather ascertained, by the number of tumuli, or barrows, near to it.

And whilst Memorials of this sort, as Rowland affirms, are to be met with in so many parts, up and down in the fields in Anglesey;‡

And are also to be met with, in different parts of Sweden,§ and of Denmark;

So doubtless many, which have been observed in the various southern parts of the world, besides those in Syria, and Palestine, may fairly be concluded to have been reared originally for similar purposes, in the earliest ages; though all tradition concerning them is now lost.

Nor are we without most striking, and most antient instances, which assure us of the truth of this conclusion: one of which is, that of the pillars of Hercules. For although fable, and superstition, confounded the memorial of them afterwards, with the two great mountains on each side the strait leading into the Mediterranean sea; yet Quintus Curtius plainly says, *such sort of columns* were reported to have been really placed by Hercules at Cadiz in Spain.|| And the memory of them is even preserved in some antient Tyrian coins, in a manner that indicates the very mode of setting them up to have been somewhat similar to that of Jacob's setting up his pillar. For there are represented, on those coins, *two Stones*, placed erect, with a figure of Hercules sacrificing by them.**

Pliny, in his Natural History,†† and Solinus also, inform us, that as these Pillars were placed as memorials of his travels in the West; so there were *certain altars* placed by Hercules, in the East, beyond the country of the *Sogdiani*; as memorials of his travels in those

* Pl. XXXV. fig. 7, in Gough's Additions to Camden, Vol. III. p. 543.

† Ibid. Vol. III. p. 559.

‡ *Mona Antiqua*, p. 93—52.

§ *Ola Mag.* lib. i. p. 8. Wormius, p. 64, 65.

|| Quintus Curtius, lib. x. cap. 1.

** Stukely's Stonehenge, p. 50.

†† Plin. Hist. lib. vi. cap. xvi. xviii.

parts. And *Festus Avienus*,* mentions Stone Pillars, or Columns; and Altars also, placed in that remote region, by Bacchus.

The account of Diodorus Siculus, detached from the poison infused into it, in consequence of superstitious and fabulous traditions, is plainly; that when Hercules found he had arrived at the extreme parts both of Africa, and Europe, he determined to set up pillars as a *Memorial* of his military expedition (*Στοιχίαι*).†

And we have, in the account given us by Quintus Curtius,‡ a clear description of the manner in which, the stones were placed, as memorials of the victory of Bacchus; and of the extent of his conquests in Scythia; which shews even the arrangement of the stones to have been very similar to that of those British Remains which we have described as still existing at Trelech in Monmouthshire. His words are—“ Transierant jam Liberi Patris Terminos; “ quorum Monumenta lapides erant crebris intervallis dispositi, “ arboresque proceræ, quarum stipites hederæ contexerat.”

To this we may add, that Sesostris, the Egyptian, when he made his conquests, set up pillars in every country he conquered. The antient writers indeed, and especially Herodotus, who § saw some of them in Syria, mention an inscription to have been placed upon them: but as there are no inscriptions upon any of the pillars or obelisks in Egypt, from the time of Sesostris, down to that of Cleopatra, except hieroglyphics; and as Diodorus expressly says, they were in the characters peculiarly read by the priests,** it is not reasonable to believe that there could be any other than slight hieroglyphical characters,†† on these monuments of his victories, erected in so much haste.

* *Descriptio Orbis*, p. 835.

† Diodorus, lib. iv. p. 157,—p. 264. ed. Wesselingii. ‡ Lib. vii. cap. ix. sec. 15.

§ Herodotus. *Euterpe*, lib. ii. 196, p. 151. Wesselingii ed.

** Diodorus, 35, p. 65. Wesselingii.

†† I have been informed by *Doctor Moses*, one of the most learned and ingenious Chemists of this age, that it has lately been discovered, that a certain preparation of lead, rubbed with a blunt iron tool, will quickly wear away the hardest *granite*, or even *basaltes*; which circumstance may both account for the manner in which the antient hieroglyphic Egyptian figures were wrought on stones which no modern tool hardly will touch; and also illustrates, in the clearest manner; those sublime words of Job; *Oh that my words were now written!—Oh that they were graven with an iron pen and lead, in the rock for ever!—For I know that my Redeemer liveth, and that he shall stand at the latter day upon the earth.* Job, chap. xix. ver. 23, 24.

Another instance of the placing a stone of memorial, which is of very high antiquity, and of a very singular kind, the rather deserves to be now mentioned, because it has so seldom been taken notice of.

It is recorded by Plutarch, in his life of Theseus: who tells us, that when Ægeus had reason to apprehend that Æthra, the daughter of Pitheus, founder of the city of the Trœzenians in Peloponnesus, would have a son born after his departure; her own father having been desirous that there should be such issue; he placed a sword, and a pair of sandals, *under a great stone*;* acquainting none but

* I have followed the common translations in this description; but must observe that the Greek word used by Plutarch is *πέδιλα*;† which, though it be rendered by one translator *sandals*, and by another *shoes*, does properly mean neither one nor the other; but rather a sort of coverings like short boots, both for the feet and ankles; similar to those which the poets describe Mercury to have worn with wings; and which are represented on several gems, and antient figures of him.

And from the peculiar manner in which they are mentioned, as being left together with the sword here; as well as from what is said of them in several passages of Homer; they seem to have been both badges of dignity, and a kind of armature; perhaps offensive, by means of sharp points, as well as defensive.

They are mentioned as a characteristic part of the *magnificent dress* of Agamemnon, in the Iliad. ‡ And in the Odyssey, the very same words used to describe this part of the accoutrements of Agamemnon, are also used to describe the golden covering of the feet of Mercury himself. ||

— ὑπὸ πρῶσιν ἐθήσατο κατὰ πέδιλα,
Ἀμβρόσια, χρύσεια—

In the sixteenth book of the Odyssey, they are described amongst the badges of honour, and distinction, fit and proper to be bestowed by a prince upon an illustrious stranger, together with a sword, and robes. § In short, they seem to have been as peculiar to the dignity of an antient Chieftain in Greece, as *spurs* were afterwards to a Norman Baron: or to a Knight of any of the Great Orders in our modern courts in Europe.

Nor is it any objection to these ideas, that Homer describes Eumæus as preparing such accoutrements for his own use; ** since it appears, both from the simplicity of antient customs; and from the respect with which Eumæus was treated by Telemachus in the palace of Ulysses, at a feast, in the presence of all the guests; that he was considered as an Officer of no inconsiderable rank. His employment in the fields was no more disgraceful to him, according to the ideas of the times, than it was to *Patroclus* to dress the food for Achilles; ††—or for Jacob to feed the sheep of Laban.

The *greaves*, ‡‡ *Κνημίδας*, which are mentioned as fastened previous to the arming for battle,

† See the first edition, printed at Florence in 1517, fol. p. 4. ‡ Iliad, lib. ii. ver. 44.

|| Odyssey, lib. v. ver. 44, 45.

§ Ibid. lib. xvi. ver. 80.

** Ibid. lib. xiv. ver. 23.

†† Iliad, lib. ix. ver. 206, 207, 208.

‡‡ Iliad, lib. xvi. ver. 131. and lib. xix. ver. 369.

Æthra with the circumstance; and directing her, that if such son should be born, and should arrive at man's estate, and be able to lift up the stone, and take away the weapons, she should then send him *with them* to Athens, to become his heir. All which was most exactly complied with, on all parts.

And as a stone, in this instance, was placed over these tokens, to keep them inviolable till the appointed time; and to preserve the memory of their designation. So we find, in other instances, that stones of memorial were placed over the dead; to preserve the remembrance of illustrious persons, when their bodies were deposited remote from their family sepulchres.

Thus when Rachel died, on her journey from Bethel, to Ephrath; and was buried at Bethlehem,* (instead of being carried to the cave, in the field of Machpelah, where Rebekah had been buried, and where Leah was afterwards buried †); we read, that Jacob set up a pillar upon her grave.

And when Ilus, the son of Dardanus, the antient king of Troy,

round the legs and thighs, seem to have been merely additional parts of armour, not so usually worn as the *πέδιλα*, and sword.

And indeed it is a circumstance that deserves some notice; though at first sight it appears trifling; that in the gems alluded to in Spence's *Polymetis*, ‡ as representations of Mercury; where his figure is represented with the *Pedila*; yet the *toes* of the feet are visible, and without any straps crossing them; for from thence we may surely conclude, that the *πέδιλα*, in other instances, although they were not wings, yet were neither shoes, nor sandals.

I must further observe, with regard to this remarkable passage cited from Plutarch; that the words, a *Great Stone*, are *πέτραν μεγάλην*: which plainly indicate a *Great Mass of Rock*, fit for a Stone Pillar; much rather than merely a large Stone: and they may therefore very well lead us to apprehend, that this Stone, placed by Ægeus so carefully, was full as large, and of as proper dimensions, as that set up by Jacob; which there is every reason to believe was reared, in like manner, by Jacob's own hands alone. And we may fairly conclude, that the Stone placed by Ægeus, on this occasion, was designed to be taken notice of, as a *Memorial*, not merely *privately* by Æthra, on account of what was so cautiously and secretly deposited under it; but also *openly* by *Pittheus*, and the *Troæzians*; as a standing record of the friendship between Ægeus, and *Pittheus*; and of his having been in that country. I may venture to add, that unless the other cause of its being placed, had been concealed by some such general apprehensions as this; either curiosity, or idle amusement, might easily have induced the natives, with united strength, to have removed it very soon; or at least before Theseus was of age, and strength, sufficient to undertake the adventure.

* Genesis, ch. xxxv. ver. 19, 20.

† Ibid. ch. xlix. ver. 31.

‡ See Pl. XIV. fig. 5 .Pl. XV. fig. 4.

was buried in the plain before that city, his body was placed under an heap, *or barrow*; and a pillar was set upon it; for we find, in the *Iliad*, mention made most plainly, and in a very descriptive manner, both of this barrow, as an eminence; and of the pillar, as a mere single stone, from behind which, Paris taking advantage of the elevated situation, shot his arrows in one of the battles, and wounded Diomed.

Pope, in his poem, which from one end to the other, is rather a paraphrase of the *Iliad*, than a translation, describes it as if there had been a regular building.—His words are:—

“ Around the fields his feather’d shafts he sent,
 “ From ancient Ilus’ ruin’d monument;
 “ Behind the column placed, he bent his bow,
 “ And wing’d an arrow at the unwary foe.”

Iliad, Book xi. l. 475.

But the fair undisguised account given by Homer is, that *Paris shot his arrows, bending behind THE PILLAR, PLACED ON THE TUMULUS, that contained the ashes of Ilus, the son of Dardanus, the ancient king of Troy*: which is exactly the description of one of these rude pillars, placed on a barrow.

It appears most manifestly also, from the account given by Plutarch, that there was a pillar of the same sort placed upon the barrow of Achilles himself; under which had previously been deposited the bones of Patroclus.

A very curious account of the ceremonies attending the first raising of this tomb, or barrow, is given in 23d book of the *Iliad*; where we find customs mentioned, no less shocking to humanity, than those amongst the most barbarous Indians, or most uncivilized nations.

The body of Patroclus was first laid on the top of a great funeral pile of wood, about an hundred feet square; and was covered with the fat of beasts that were sacrificed. The carcasses of the beasts, and the bodies of Trojan captives, who were most cruelly slain in cold blood on the occasion, were then flung on the pile round the margin; and afterwards the whole was reduced to ashes. The next day the remains of the fire were extinguished, by pouring wine on

the embers; and as many fragments as could be collected of the bones of Patroclus, (which were distinguished by being found in the *very midst* of the heap) were wrapt up in fat, and put into a rich urn, having a veil of linen flung over it.

Then the whole army flung earth upon the spot where the pile had been consumed; covering the bones of the Trojans, and of the beasts, and all the ashes that remained; and rearing an high rude hill, or barrow; under which, nearly in the centre, the urn was placed; and as it should seem, in such a manner as to have a narrow passage or gallery left, leading to the spot; because Achilles expressly directed, that his own remains, when he should die, should be placed by those of his friend.

After this, solemn games were performed; and chariot races; round the Barrow; in honour of the deceased.

Here ends the account given by Homer. But in Plutarch's life of Alexander, we find; that when that Great Conqueror had passed the Hellespont, and was arrived near the ruins of Troy, he anointed, with much ceremony, *the Stone placed on the tomb, or barrow of Achilles*; poured out libations; and as the antient custom was, ran naked round the sepulchre; and crowned *the Stone* with garlands.

And it is very remarkable, that the original Greek word used by Plutarch,* to describe what his translators call *the Gravestone* of Achilles, is ($\Sigma\eta\lambda\eta\nu$) or *Pillar*; the same word that is used by Homer to describe the stone pillar, on the tomb, or barrow, of *Ilius*.

There is the greatest reason also to believe that Homer intended to intimate to us, that exactly such a barrow, or tumulus, with its proper pillar at the top, was placed over the ashes of Hector.†

So also he gives us to understand, in his *Odyssey*, that over the remains of Elpenor, a tumulus or barrow was raised, on which was placed a stone pillar; and on the top of this, one of the oars of the ship was set upright.‡ The word he makes use of is $\Sigma\eta\lambda\eta\nu$, which every where so uniformly denotes the rude Stone Pillar.

And Pope's translation here, conveys nearly the proper idea; only it implies more of finish and ornament, both in the barrow

* See the first edition, printed at Florence in 1517, folio, p. 285, at bottom.

† *Iliad*, Book xxiv. at the end.

‡ *Odyssey*, Book xii. ver. 14, 15.

and pillar, than the plain account given by Homer allows us to add to our idea.

“ The rising tomb a lofty column bore,
“ And high above it rose the tapering oar.”

Mention also is made, of the supposed raising of a Tumulus by all the Grecians, in honour of Ulysses; had he died, either at Troy, or amongst his friends: or in honour of Agamemnon; if he had died before the walls of Troy. Which circumstances Pope, though departing from the original simplicity of the words, describes in the two passages, in a manner, that perhaps conveys the idea of the real supposed designed Tumulus, with the pillar upon it, even better than he intended. His words are,*

“ That grateful Greece with streaming eyes might raise,
“ Historic marbles to record thy praise.”

And conformably to these more antient usages, we find a barrow, and a pillar upon it, still existing in the county of *Caterlough*, in Ireland. It is not indeed to be supposed, that just the same magnificent and expensive ceremonies had been observed *here*, as on forming the barrow for Patroclus, and Achilles: though indeed more barbarous ceremonies than those of the Trojans could not well be used. But the barrow itself, and its pillar, most minutely correspond, on a smaller scale, with what the appearance of that of Achilles must have been.

It is a Tumulus (now called *Castle More*, near Tullagh, in *Caterlough*); about thirty feet perpendicular in height; † having on the top, a square stone, five feet high; and on one side the appearance of there having been, originally, an entrance to a Cave underneath.

And there is a most remarkable well known fact, preserved on record; which was perhaps one of the last instances of the prodigious efforts often used for these kind of purposes.

Harald, the son of Gormon, employed his whole army, and a vast

* *Odyssey*, book xiv. l. 369. Book xxiv. l. 32.

† A representation of this is given in Mr. Gough's additions to Camden, Vol. III. Pl. XLIII. fig. 6. p. 529 and 533. And I have inserted a drawing of it, Pl. XI. fig. 1.

number of oxen, to draw a stone of enormous size, from the shore of Jutland, to be placed over the grave of his mother.*

A fact, which at the same time that it serves to shew how late these rude observances remained in use; explains also the very rude means by which the removal, and erecting of vast stones, was effected by barbarous nations.

After the Britons had embraced Christianity, and were somewhat more civilized; these rough, and ponderous stones, placed upright as pillars, were succeeded by those very rudely carved high stones, found in several of our most antient churchyards; as particularly at Penrith in Cumberland; † and described by so many of our antiquaries. And afterwards these latter were again succeeded by Stone Crosses placed upright; with which ended the usage of placing pillars on graves in this country.

In a somewhat similar manner, the rude stone pillars had previously been changed into the adoption of works of art, and of curious workmanship (and even into the forming of regular structures) in the most antient countries upon the face of the earth.

For in Egypt, the mother of arts; and the mother also of all abominations, we find, first, remains of the original use of rude pillars of stone; and even of mere rocks formed into the shape of pillars: of which there is a remarkable specimen, opposite to the island of *Phylæ*, on the banks of the Nile. ‡ And then we find these rude memorials to have been succeeded by their wondrous hieroglyphical Obelisks.

So at *Banarow*, in India, we are informed by Tavernier, § there is a very remarkable obelisk with hieroglyphics, thirty-five feet in height.

And even in Persia, where all idols were abhorred; near the ruins of the antient palace of Persepolis (whether what are so called were really the remains of the Edifice, destroyed by Alexander, or of some antient temple) are found pillars standing, with inscriptions, || which pillars cannot be numbered amongst those that supported the building.

* Wormii Mon. Dan. p. 39.

† Archaeologia, Vol. II. p. 43.

‡ See Pococke, Vol. I. p. 121.

§ Tavernier's Voyages, Vol. II. p. 32.

|| Le Bruyn's Travels, Vol. IV. p. 320.

And in Syria, a country of no less antiquity, we find three most magnificent remains; which plainly, in this respect, speak for themselves; and shew that *they* were originally substituted, as designed funereal memorials, in the room of such rude stones, as had formerly adorned the tombs of Ilus, and Achilles.

They are described by our curious traveller Maundrell, in the following manner:

The one has the appearance of a tower, thirty-three feet in height: but consists merely, first of a single stone, as a pedestal, fifteen feet square, and ten feet high; then of a very tall vast stone, in form of a cylinder; and lastly of another stone at the top, cut in the shape of a cone, or rather of a multangular pyramid.

The other,* also resembles a tower: and consists first of a single stone as a pedestal, sixteen feet and a half square, and six feet high; having four very rudely carved figures, like lions, at the four corners; and then of one other single, round, and tapering stone; rounded, in such a manner at the top, as to be there in the form of an hemisphere: and this second stone has two rudely carved bands, or mouldings, running round near the higher part. Whilst the whole height of this pile is thirty feet.

And a third structure, of the same kind, stands at the distance of about a furlong. All of them being a little to the southward of the river Aradus; and about a quarter of a mile from the sea; and having sepulchral chambers, hewn out of the solid rock, under them; in which remain many long narrow cells, for the depositing of bodies.

But whilst the Patriarchal custom of rearing pillars of stone, was thus changed in countries where arts multiplied, and civilization advanced; so on the other hand it was transferred, in its rudest mode into, and longer preserved in, the more barbarous regions.

And amongst the instances that might be produced, of this; there is hardly any one more surprising, or curious, than that which is to be met with in Easter Island, in the South Seas:† where stone pillars, which Captain Cook calls a sort of statues, were found standing, of twenty-seven feet in height. And it is remarkable, that in

* There are drawings of both, engraved in Maundrell's Travels, p. 21; and also in the Universal History, fol. ed. Vol. I. p. 396. † See Forster's Voyage, Vol. I. p. 593; and Cook's second Voyage, Vol. I. p. 284, 294, 296. Pl. XLIX.

the same place also, there were curious remains of masonry, without cement; of much the same kind with that which has been so often met with of the antient Britons.

Perhaps I might also here, very well add, that other instance, in the Island of Tinian:* although the writer of Lord Anson's voyage conceived the pillars there to have been formerly foundations, or supports of buildings now destroyed: for the representations of them by Sir Percy Brett, are more conformable to the idea of their having been Pillars of Memorial.

And we ought not to forget, that stones are said to be set up in the island of *Sou*, or *Saou*, on the accession of every one of their kings. And that they have a solemn assembly, and a feast, at the respective stone, at each king's death.†

Besides Pillars being placed for all these kind of purposes; it is undoubtedly too true, that, as on the one hand, the spots where such memorials were placed, became in a succession of ages consecrated as it were to Solemn Public Meetings;‡ and to some Sacred Uses; (as we find *religious* assemblies were held, both at Gilgal, and at Mizpah): so, on the other hand, these memorials, through the corruption of succeeding ages, were sometimes made the occasions of idolatry.§ And such kind of pillars were, in the end, even set up as objects of idol worship themselves.

But this was a sort of abuse, and horrid abomination, over which it is better to draw a veil: and to leave it to perish in everlasting detestation, and oblivion. And especially, as it is impossible *now*, to distinguish precisely, *which* were *which*: and as the purpose of the present Inquiry is, merely to shew, what kind of Structures, and Memorials of various kinds, were reared, by those rude, first inhabitants of this Island, who were most probably less corrupted than many of their Successors; and who had not learned, to build any thing more than huts, as habitations for themselves: and preserved nearly unchanged the earliest Patriarchal Usages.

* Anson's Voyage, 8vo. ed. p. 411. † Hawkesworth's Voyages, Vol. III. p. 695.

‡ See Judges, chap. xx. ver. 1. 5. Chap. xxi. ver. 1. † Samuel, chap. vii. ver. 5, 6. 16. Chap. x. ver. 8. Chap. xi. ver. 14, 15. § † Kings, chap. xii. ver. 33.

CHAPTER III.

CONCERNING CIRCLES OF MEMORIAL ; OF OBSERVANCES ; AND
OF OBSERVATION.

THE Remains that in the next place deserve our attention, after the first more simple ones ; are those *Circles of Memorial, and of Observances* ; that are so often called erroneously, *Druid Temples*.

That great *Stones* standing upright, were in the most antient times placed occasionally in groups, formed of several standing together, *merely by way of Memorial* ; and having their numbers conformable to some particular circumstances relating to the people who placed them ; or to the occasion on which they were erected ; seems to appear from what we read even in the first informations we have in the world ; concerning the history of the Israelites : some of whose methods of recording great events, were perhaps permitted to be in conformity with still more antient usages, in order to have them the more extensively and universally understood.

Thus, when the Law had been delivered to the people of Israel by Moses, at Mount Sinai, and had been written by Moses in a book ; we are told, as the translation stands in our copy from the Hebrew,* that “ *Moses builded an altar under the hill, and twelve pillars according to the twelve tribes of Israel.*” And the translation of the Seventy expressly calls them *twelve Stones*.

And when Joshua, with his whole army, and all the people, had passed over the river Jordan ; whose waters had been dried up on that occasion in a miraculous manner ; (probably by means of some earthquake, or convulsion, stopping those from the upper part ; whilst those below ran off, and fell away ;) we are told, that in consequence of the express appointment of the Almighty, Joshua commanded *twelve men*† to take up *twelve stones* out of the midst of Jordan ;

* See Exodus, chap. xxiv. ver. 4, 5, 6, 7, 8.

† Joshua, chap. iv. ver. 1, 2, 3, 4, 5.

* *And those twelve stones which they took out of Jordan did Joshua PITCH in Gilgal. And he spake unto the children of Israel, saying, when your children shall ask their fathers in time to come, saying, what mean these stones? Then ye shall let your children know, saying, Israel came over this Jordan on dry land. For the Lord your God dried up the waters of Jordan from before you, until ye were passed over, as the Lord your God did to the Red Sea, which he dried up from before us, until we were gone over: That all the people of the earth might know the hand of the Lord that it is mighty: that ye might fear the Lord your God for ever.*

Now the word *pitch*, here used in our translation; and the Greek word *εστησεν*, which we find in the Septuagint, seem plainly to indicate, that these stones were set up as *pillars*. Although, indeed, their being carried upon men's shoulders, shews, that they must perhaps have been but small, in comparison of some other pillars set up as memorials. It shews, however, that they were chosen of a shape and form fit for that purpose. And if they were indeed *set up*, in a group, as *pillars*; there is no form in which they can be conceived to have been placed, so likely, as that of a Circle. This has been remarked by Dr. Borlase;+ who also concluded, that twelve such stone pillars were so placed, by Moses, near Mount Sinai, at the time of the giving of the Law, and of Moses's going up into the mountain; because it is said, ‡ that, *when he rose up early in the morning, he builded an altar under the hill, and twelve pillars.*

In the Septuagint, it must be confessed, the expression is such as not *necessarily* to imply any thing more, than that the altar was built with twelve stones. And it must also be acknowledged, that in the other instance mentioned, with regard to Joshua, we find Josephus saying, "that Joshua built an altar of those stones, which all the heads of the tribes had taken out of the deep; to be afterwards a Memorial of the division of the stream of the river."||

Which seems indeed, at first sight, to imply, that the altar was built with those very twelve stones; instead of their being set up as pillars.

* Joshua, chap. iv. ver. 20 to 24.

+ Antiquities of Cornwall, p. 195.

‡ Exodus, chap. xxiv. ver. 4.

|| Antiquities of the Jews, book v. chap. i.

Yet, when we consider that, even in the Septuagint version of the Scripture, the Greek word used, expressly indicates that the stones were *pitched*, (or *set up*) in Gilgal; and not that they were placed to compose or form an altar: and that twelve other stones also, are expressly said to have been *set up*,* in Jordan itself, before the waters rose again, in its bed, to their usual height; it is much most reasonable to conclude, that these masses of rock were in both instances placed *as pillars*, according to the usage of the times; as a Memorial of this great event; rather than that they were so laid upon one another, as to form an altar.

It may further be added, that such a conclusion is greatly confirmed, by what must have been the case on Mount Ebal, with regard to the stones set up there.

For we read, in the Law, the command concerning *them* as follows: †

1. "It shall be on the day when you shall pass over Jordan unto the Land, which the Lord thy God giveth thee, that thou shalt *set thee up great stones*, and plaister them with plaister.

3. "And thou shalt write upon them all the words of this Law, when thou art passed over, that thou mayest go in unto the Land which the Lord thy God giveth thee, a Land that floweth with milk and honey, as the Lord God of thy fathers hath promised thee.

4. "Therefore it shall be when ye be gone over Jordan, that ye shall *set up* these stones which I command you this day, in Mount Ebal, and thou shalt plaister them with plaister.

5. "And there shalt thou build an altar unto the Lord thy God, an altar of stones: thou shalt not lift up *any iron tool upon them*. ‡

6. "Thou shalt build the altar of the Lord thy God of whole stones: and thou shalt offer burnt offerings thereon unto the Lord thy God.

* Joshua, chap. iv. ver. 9. † Deuteronomy, chap. xxvii. ver. 2, 5, 4, &c.

‡ It seems as if this injunction, repeated so often in the Law, that no iron tool should be lifted up upon the stones, whereof the altar of God was to be composed, was designed emblematically to impress upon our minds the awful and just consideration, that we can indeed, at our best estate, render nothing unto God but an acknowledgment of his bounteous gifts; which we are so far from being able to add unto, or to improve to any effectual purpose, that we can hardly use them at all properly.

7. "And thou shalt offer peace offerings, and shalt eat there, and rejoice before the Lord thy God.

8. "And thou shalt *write upon the stones*, all the words of *this Law, very plainly.*"

Whether the writing of the words of the Law, *very plainly*, could or could not be effected without an iron tool, I will not presume to determine. But it is surely most evident, both from the circumstance that such writing was to be *upon the stones*; and from the command that they should be plaistered over with plaister; that those stones could not be used, in this instance, for constructing the altar; on which both burnt-offerings were to be *consumed*, and peace-offerings offered. The words of the Law were to be written *very plainly*. And as there are exactly twelve *precepts* of the Law mentioned in this chapter, which were to be written on these stones, with the twelve denunciations; there is the strongest reason to conclude, that there were, in this instance, twelve pillars set up; and that there was a command, and a denunciation, written on each pillar.

And however this matter may have been; here were, in each one of these instances, twelve *stones* placed as *Stones of Memorial*,^{*} designed to be referred to, as records, in after ages.

We have a proof also of such sort of stone circles existing in other parts of the East. For Chardin tells us,^{*} that between *Tauris* and *Suttanie*, in Media, they saw "on the left hand side of their road, *great Rounds (or Circles)* of free-stone, which the Persians say are marks that *the Caous*, or *Kaous*, the antient giants of the Persians, held their councils there, when they made war upon Media. It being the custom of those people, that each chieftain who entered into the council should bring a stone with him, to serve him for a seat. But," says Chardin, "the wonder consists in attending to the bulk of the stones; they being so large that eight men could hardly move any one of them; † and of such a kind of stone, that

* Voyages de Chardin, Tom. I. p. 192. ed. 1711.

† Surely we may be allowed to conclude, that on such an occasion, each Chieftain might be at liberty to employ as many of his men as he pleased, to convey such stone, by means of ropes, and poles, upon their shoulders. And I do not know that we are forbidden to annex the same idea, to the conveyance of the stones from the bottom of Jordan, by the command of Joshua.

“ they could not have been brought from any less distance, than
“ from mountains six leagues off.”

We find therefore *here*, an account of Stone Circles, which agrees exactly with the description of those in our own country. And their being referred by tradition to the time of the giants, plainly shews they were of the highest antiquity.

The corruptions of later ages, in other countries, as well as in Palestine, and Syria, and Media, introduced undoubtedly much superstition, both as to the *form*, and the *mode* of placing such stones; and also as to certain dances, or solemn circuits (the invention of blind superstition) to be made round them. And hence, are derived the many variations in the form of the construction of Circles of rude Stone Pillars; which have given occasion to a great variety of learned and ingenious conjectures. With such I shall not interfere; but must plainly observe, that from what is recorded concerning the most antient usages; there can scarcely remain a doubt in the mind, but that some of these circles were used as Courts; or as places for electing Kings, and Governors, and for holding Councils; and for trying causes.—Some of them were for mere Memorials, of great Events.—Some were for making the superstitious walks, and turnings; or dances three *times round*, so often mentioned,* both by poets, and writers of old romances; and of which kind of dances, there are remains to be found, amongst the more sequestered tribes of modern rustics, in Scotland, in Ireland, and in America, even to this day.†—Some were for the exhibition of public Games, and Spectacles.—And some for Sacrifices.

And it may be remarked, that although the number of stones in these Circles is not uniformly the same: some being of nine stones;

At the same time, it may surely be allowed to be remarked; that as to each stone serving for a seat:—from its great bulk it could not so well serve for a seat to sit upon; as for a station, at which to sit.—And the considering the matter in this light, will both illustrate many curious passages of antient history; and render several curious remains of antiquity more intelligible.

* Antiquities of Cornwall, p. 129.

† Thus in Martin's Description of the Western Isles (p. 248.) we read, that the natives of *Collonsay* Isle are accustomed, on their arrival in *Oronsay* Isle, to make a tour, sun-ways, about the church. And in the Isle of *Egg*, there is a heap of stones, called *Martin Dessil*, about which the natives oblige themselves to make a tour round, sun-ways, p. 277.

some of nineteen; and some of many more; yet the most usual number of which they are found to have been composed, is *twelve*.

There are also some of these circles, found to have been most curiously and nicely erected, *on geometrical plans*, so as to have either the chief entrances, or some particular stones, in a line facing the cardinal points of the heavens;* or at least only deviating therefrom in such manner, as may well be accounted for, either from the precession of the equinoctial points since their erection; or from the variation of the needle. Which circumstance induces me to add, with the more earnestness, one further conclusion, to the many that have been formed with regard to these circles:—a conclusion, which I am firmly persuaded deserves to have the support of more numerous and exact observations, on the very spots, than it has ever been in my power to make.

It is well known, from the accounts given us by antient writers, that the British Druids were particularly well skilled in the science of astronomy; as far as that science had been previously improved in those early ages; and that some further improvements were even made by themselves.

Cæsar, after having informed us that the science and mode of education amongst the Druids in Gaul, was understood to be derived from the Druids in Britain, (where indeed they seem to have fixed, in the first instance, their principal establishment, on account of its retirement from the rest of the world; and on account of its security as an island; as they did afterwards, and finally, in *Anglesey*); informs us, † that “they taught many things to their scholars *concerning the Stars*, and their motion; concerning the magnitude of the world, and the regions of the earth; and concerning the natural history of things.”

And Diodorus Siculus, speaking of the same persons, in Gaul, (whom according to the copies of his history that have come down

* *Antiquities of Cornwall*, p. 193—see also p. 115; where it is remarked, that Dr. Stukeley found the Circles at *Stone-henge* to be so placed, as to have the meridional diameter at the variation of between six and seven degrees to the East of the north. And those at *Abury*, so as to have that diameter about ten degrees the same way. See also Stukeley's own account in his *Abury*.

† *De Bello Gallico*, lib. vi. sect. 15.

to us, he calls Σαρουίδας, *Saruids*)* says they were both *philosophers* and *divines*.

And Strabo, who divides the whole body of these (the only scientific and learned men of the western regions of Europe,) into *three* classes; the *Bards*; the *Teachers*, (or *Prophets*;) and the *Druids* (properly so called);—says, the *Bards* sing Hymns, and compose Poems:—the *Teachers*, are those who officiate at the sacrifices; and speak concerning Natural History;—and the *Druids*, besides Natural History, cultivate Moral Philosophy.—And that they declare, *that souls, and the world, are incapable of perishing by means of corruption: and that fire and water shall at length prevail.*† That is, if the words can have any meaning well annexed, *shall prevail to the restoration of both.*

ἐπιμαρτυρεῖν ὅτι ποτε καὶ πῦρ καὶ ὕδωρ.

I have ventured to give the translation of this passage as nearly and closely as possible, as it stands in the original Greek; and the rather; because it is so very remarkable, on account of its congruity with the first traditions of mankind, as recorded in Scripture; and even with doctrines of Revelation afterwards delivered.

We see therefore, that the body of the then only learned men, in these parts, commonly called *Druids*; (from whom even *Pythagoras* is apprehended to have obtained some useful information, if not the best part of his knowledge,)‡ were acquainted, in a degree, both with some certain branches of *Natural Philosophy*; and with *Astronomy*.

And as the latter Science could neither be improved, nor indeed be made at all useful, without some sort of *Instruments for Observation*, however rude or rough such might have been; or without some means of determining certain particular points in the heavens; we may fairly suspect, and indeed almost positively conclude, when we actually find certain of the great perpendicular stones, in so many of these *Druidical Circles* so very carefully placed *in, or near the*

* Diodorus, lib. v. 213, p. 354. And see a learned Note concerning *this name*, in the edition of *Wesselingius*.

† Strabo, lib. iv. Paris ed. 197. p. 302, ed. Amst.

‡ Strom, lib. i. p. 357. Borlase, p. 74. Alexander Polyhistor in *Clemens Alexandrinus* expressly says, that *Pythagoras* heard both the *Druids*, and the *Brachmans*.

meridian of the spot ; whilst others are placed as cautiously exactly to the east and west of the centre ; and that the rest (although placed obviously with as great care) are yet set at very and strangely unequal distances in the periphery of the Circle ; we may, I say, fairly suspect, that all these were so placed, with real design, to answer the purpose of rude astronomical instruments ; in a manner somewhat similar to the use of the *Azimuth Compass* ; and of the *Astro-labe* : and might answer the end, at least as well as the Azimuthal Horizon, described by Father Le Comte ;* which was so magnificently, and so carefully erected, under the direction of the Jesuits, in China.

Part of the intent might be, that by looking along the edges, or sides, of two opposite stones in the circle, certain determinate points, either in the horizon, or at certain elevations above it, might at fixed times be marked out : from whence an observer might be enabled to ascertain precise points in the ecliptic or zodiac ; and to ascertain more easily the varying distances of the planets from certain fixed stars ; and might, by that means, the better observe their motions.

At least such instruments might enable them to ascertain the identical places of the rising and setting of certain fixed stars : and to preserve the knowledge of the times of their rising, and setting, throughout the year ; even when, from their proximity to the sun, they became invisible.

At the same time also, by means of the different heights of the stone pillars, certain and different altitudes, both in the meridian, and in azimuths, might be observed in the heavens ; and though rudely, yet with some degree of precision be determined, by an observer standing at the opposite corresponding stone, on the verge of the circle (that is, at the opposite end of the diameter,) and having his eye placed at a determinate height from the ground, either by means of a staff, or of some known mark in the side of the stone.

They might also, by means of the combined effect of the relative position of the shadows of the several stones, (which, when compared with the situation of the stones themselves, would be varying

* Account of China, p. 66.

almost every minute,) the more accurately distinguish the hours, or portions of the day: and cause the Sun, and also the Moon, to become the more useful, for that very purpose, for which we are told, in Holy Writ, the two great luminaries of the heavens were ordained; that is to be *for signs, and for seasons, and for days, and years.**

It would be not unworthy the attention of some good practical astronomer, in order the more fully to ascertain this matter, to take accurately the bearings of the opposite stones in some of those *circles* which remain in the best state: and to compare those bearings with the corresponding parts of the horizon of the place, upon a globe; and to observe how such parts were intersected by the parallels of declination of some of the most remarkable fixed Stars, at their rising, and setting: making at the same time due allowance for the precession of the Equinoxes, during the lapse either of two, or three thousand years.

We might, by that means, perhaps discover, almost with precision, what the astronomical skill of the antient Druids really was; and what was the more immediate purpose of their observations.

And this I venture to mention; although I am well aware, that in the latter days of Druidism the grossest superstition, and ignorance, was become so prevalent, that even some of those actually called *Cerrig Brudyn*, or *Astronomers' Stones*, might be stupidly reared without the least regard to those proper adjustments, which the original use required.

Some it is probable would be discovered of an earlier and more cautious construction, that would develop the designed primæval use.

And in conformity to these ideas it may further be remarked, that most of the very distinguished Druidical circles are placed on eminences, commanding a free and extensive horizon.

Thus, one of them is situated near the high summit of *Cader Idris*, or *Caer-Edris*, in Merionethshire; and is even to this day called *Cerrig Brudyn*, or the *Astronomers' Stones*, or *Circle*:—on beholding which it ought to be remembered, that it is allowed by all

* Genesis, chap. i. ver. 14.

the most learned,* that the antients denoted *Astronomy* itself by the name *Edris*: a name attributed to *Henoch*, or *Enoch*, who has ever been deemed the first founder of that Science.

There is also a circle of stones in Caermarthenshire, which there is very great reason to think answered the same sort of purpose. It is erected on a mountain near *Kil y maen Llwyd*, and is called *Buarth Arthur*, or *Meineu Gwyr*.† The diameter of this circle is about sixty feet: and the stones are extraordinary rude; pitched, on end, at uncertain intervals, of three, four, or six feet; and being from three to six feet high. Only fifteen are standing; and, at least seven or eight seem to have been carried off. The entrance, for about three yards, is guarded on each side by lower or smaller stones contiguous to each other: and opposite to this avenue, at the distance of about three hundred paces, stand three other large rude stones.

And the well known circles of stones, at Stanton Drew, in Somersetshire, seem to have been designed for astronomical observations, and for superstitious rites conjointly. The principal one there, forms, like that at Stone Henge, in reality a sort of ellipsis, of about 330 by 260 feet, and not a regular circle. And there are stones

* See *Mona Antiqua*, p. 84. To which it may be added, that perhaps the Patriarchal skill of the Druids in Astronomy, and the degree of science which, according to Cæsar's account, they had attained unto, notwithstanding the rudeness of their instruments; as also that of the Chaldeans; and such ideas of dividing time, by means of observing the motion of the heavenly bodies, as are found to have been preserved either in Egypt, or in India, or even in Peru, as well as in Britain; may best be accounted for, by deducing the first origin of the whole, from a circumstance, the memorial whereof, we find from Josephus, was preserved by an antient tradition amongst the Jews:—that the most religious of the long lived Antediluvian Fathers, who were the most direct descendants of *Seth*, had employed much of their time in putting together successive astronomical observations; the remembrance of the first of which had been preserved by the posterity of Shem.

And hence perhaps we may the more easily account for the reverence attached to all who were skilled in such kind of science, in the barbarous ages of the world: and for the usual connection which those possessed of such knowledge, like the Magi, and the Druids, and the Egyptian Priests, and Bramins, ever have had both with legislation and government.

Josephus, consistently with such tradition, even goes so far as to intimate, (*Antiq. Jud. lib. i. cap. 3. sec. 9.*) that Almighty God afforded those first ancestors of mankind a longer time of life, because of their virtuous exertions, and because of the good use they made of their time, in astronomical and geometrical discoveries; for which a long period of life was necessary.

† Gough's *Camden*, Vol. II. p. 510.

cautiously placed nearly on each side of the meridian ; two at the one end, for a sort of observer's index, and two at the other, as if designed for *leading* sights to direct the eye to certain points in the heavens equally distant, a little to the east and west of the south : and so in like manner two to the east, and one on the west side for an index ; as if to observe the rising of certain stars and planets. The rest of the stones of this circle are at most *unequal* distances ;* but yet apparently fixed in their situations with great circumspection. Within the circuit appears, lying on the ground, a great altar stone, as at Stone Henge, placed towards the east ; and at some distance on the outside of the circle, in the same direction, is a great and high stone of memorial. All these circumstances should be borne in mind, to compare them with other remains of a similar kind.

The stones in general are in height, from 8 to 14 feet ; which would lead the eye of an observer to a considerable height in any azimuth circle ; and from 6 to 8 or 10 broad ; and 3 or 4 feet thick.

Near adjoining to this great circle of stones, are two other smaller ones, which seem plainly to have been mere appendages to this.

And not far off, towards the north-east, on an high hill, is an antient fortress containing about thirty acres, called *Stanton Bury* ; which appears to have been British ; whilst at the same time a number of barrows, on the top of Mendip hill, point out the former residence of many Britons, and Druids, of high rank, in these parts ; as well as near Stone Henge.

Thus much for Astronomical Circles :—as to the rest, there would be no end hardly of enumerating the many curious remains, which might be named, to illustrate the general observations concerning such circles having been designed, for superstitious dances, and other superstitious rites ; for courts of judicature ; for inaugurations ; and for councils. Whilst yet, at this distance of time, it is impossible for us to ascertain precisely which were which.

For illustration therefore of their general appearance solely, I shall only add one or two representations, and a few general descriptions.

* Plans and Views of the whole may be seen in Gough's Camden, Vol. I. p. 81. Wood's Description of Bath, p. 147, 159. And somewhat more correctly in the Gentleman's Magazine for 1785, p. 762.

Pl. V. Fig. 1. represents the plan of a Druidical Circle, on the hill of *Fiddess*, in the Highlands of Scotland; of which Mr. Anderson gives us a very curious account;* informing us at the same time, that there are several others, in that country, which he has examined; and that they are for the most part placed upon an eminence, and usually on that side of it which declines towards the south; and seem to have been all formed after one sort of plan, with little variation.

This on *Fiddess* hill, is forty-six feet in diameter, and consists of *nine long stones* marked C, placed on end, in circular form, at distances nearly equal, but not exactly so. The area E, within this circle, is smooth, and somewhat lower than the ground around it. By this means, and by means of a small bank carried quite round between the stones, which is still a little higher than the adjacent ground on the outside; the circular area has been most distinctly defined. Between two stones that are nearest the meridian line, on the south side of the area, is laid on its side, a long stone (A); at each end of which are placed two other stones, smaller than any of those that form the outer circle. These are a little within the circle, and at a somewhat greater distance from one another. And still further within the line are placed two other stones; which, with the two former, are marked DDDD in the Plan. Behind, or rather within the large stone, the earth is raised something more than a foot higher than the rest of the Circular Area; this is shewn at (B). Mr. Anderson conceives this eminence to have been the station of some officiating Priest or Druid, at some solemn rites. But it was surely rather the seat of *the presiding Judges*.—And it is material to add, that of the many circles of stones which Mr. Anderson examined, he observed there was not the mark of any tool upon any of them; and that they were seldom less than 6 or 8 feet in length, (or rather in height), and usually about 10 or 12, and sometimes 16.

And in the shire of Nairn, he says, where thin flat stones much abound, he saw some structures of this kind, where the stones almost touched one another all round.

Corresponding with these accounts, Dr. Garden informs us, † that

* *Archæologia*, Vol. V. p. 246.

† *Ibid.* Vol. I. p. 512.

in the north parts of Scotland there are many of these circles of large, tall, unpolished stones, set upon one end; most frequently consisting of one circle only; and of stones at nearly equal distances; but sometimes having towards the south, or south-east, a large broad stone standing on edge, and filling up the whole space between two of the stones; and sometimes having an inward circle of smaller stones; and in one instance, which he saw, having three concentric circles.

Mr. Pennant also mentions having seen some remarkable antiquities of a similar kind in the Isle of Arran.*

There are, he says, on the plain of *Tornore*, the remains of four circles in a line, extending north-east by south-west; very few of the stones indeed are standing to perfect the inclosure; but those that do remain shew what each circle was, and are of a great size, and stand remote from one another. One of them is even 15 feet high, and 11 feet in circumference. And on the outside of these circles are two others; one whereof differed from all he had before seen, consisting of a double circle of stones, and a mound within the lesser circle.

And about a mile from *Connel*,+ in the neighbourhood of the Bay of Mull, near the site of what is supposed to have been a British town; he also saw another Druidical circle, formed of round stones placed close together, inclosing an area 26 feet in diameter, and having an erect pillar 7 feet high, about the distance of 10 feet from the outside.

And in Wales, as indeed we might reasonably expect, he met with still more perfect remains.

For in the neighbourhood of *Cors-y-Gedol*, on a flat plain, in the mountainous country surrounding Snowdon, are two remarkable circles; the first about 56 feet in diameter, formed of piles of loose stones, with upright columns placed at five yards distance from each other, *in pairs*, so as nearly to divide the circle in four parts: and the other, about thirty yards distance, formed of several upright stones, among smaller, but placed with less regularity; nevertheless in such a manner, that design, not chance, seems certainly

* Voyage to the Hebrides, p. 180.

+ Ibid, p. 357.

to have directed the founders of these circles in the disposition of every one of the columnar stones.*

Half a mile south of these circles, on the side of an hill, also are some great Cromlechs.

Near *Glenenney*, in the same tract of country, on *Bwlch Craigwen*, is a fine Druidical circle, consisting still of thirty-eight stones.† And at a mile's distance, and within sight of this, above *Penmorva*, is another.

In Cumberland also, not far from Keswick, on the summit of a broad and high hill, is an oval circle about thirty-four yards from north to south, and near thirty from east to west, formed of forty stones, many of which are now fallen down, some inward, and others outward; ‡ and having on the north side two larger than the rest, standing five feet and a half above the soil; and having also, on the east side, a small rectangular area, parted off by ten stones; where seems to have been the altar.

In Derbyshire also, on *Hartle Moor*, is a Druid circle, consisting at present only of six stones; one of which is 17 feet high. But there is reason to conclude, that it consisted originally of nine stones. This has been well described, and represented, by Major Rooke; § who has also given a good representation of another circle of nine stones, on *Stanton Moor* near *Rowter*, which had a single stone standing at 34 yards west from it; and seems also to have had another single stone, originally placed in the centre.

And it may be observed, that these circles, so containing a single stone in the centre, seem above all others to have been designed for civil and legal solemnities; and for inaugurations; and for holding of councils, (the King, or Chieftain, according to the most antient usage, standing by the pillar, in the midst, and the great officers standing by their respective pillars, in their proper stations around him.) And of these circles, one of the most complete seems to be that described by *Borlase*, at *Boscawen-un*, in *Cornwall*,** of which,

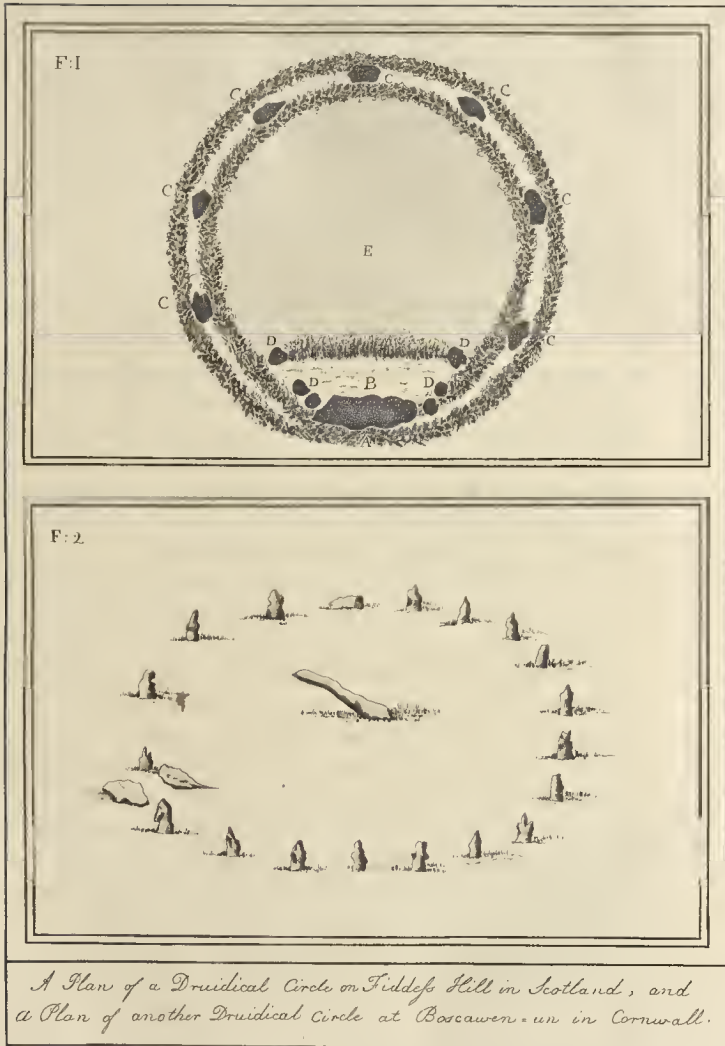
* Journey to Snowdon, p. 110.

† Tour in Wales, Vol. II. p. 189.

‡ Pennant's Tour in Scotland, and Voyage to the Hebrides, p. 38. and Pl. I. fig. 1. There is a view also of this circle in the Antiquarian Repertory. Vol. I. p. 239.

§ In the Archaeologia, Vol. VI. p. 113.

** Antiquities of Cornwall, p. 205.



G. Richardson, Sculp.



therefore, I shall borrow the representation, Pl. IV. fig. 2. in order to convey a general idea of their appearance.

A great stone also is sometimes placed in the centre, manifestly designed to have been a sort of tribunal to stand upon; or, at least for the principal person to stand near unto it; of which there is a most remarkable instance in the centre of a great circle of stones,* at *Classerness*, in Lewis, one of the Western Isles.

And in the same Western Islands, where on account of their sequestered situation, many primæval, and antient customs, and superstitions, have been preserved longer than in other parts; we find also remains of the *Crowning, or Inauguration* stone.

For in the Island of *Ila* there was fixed a large stone, 7 feet square, in which there was a cavity or deep impression made, to receive the feet of *Mack-Donald*, who was crowned king of the Isles standing *in this stone*; and swore that he would continue his vassals in the possession of their lands; and do exact justice to all his subjects; and then his father's sword was put into his hand; and the bishop of *Argyle*, and seven priests anointed him king, in presence of all the heads of the tribes in the Isles and Continent: and at the same time an orator rehearsed a catalogue of his ancestors.†

Here also the high court of judicature sat, consisting of fourteen; to whom there was an appeal from all the courts in the Isles; and the eleventh share of the sum in debate was due to the principal judge.

We have here, therefore, a most remarkable instance of the preservation of antient customs, which seem to have been derived from Druidical times, cœval with the erection of the circles of stones.

And on this occasion it cannot but be recollected, that in conformity to these kind of antient usages, there were furious and destructive wars continually raging in Ireland, between the family of O'Donnell and the family of the O'Neals, from age to age, even down to the time of king James, merely in order to acquire dominion over the county of Donegall, by virtue of obtaining the ceremony of inauguration, attended by a sort of popular election, to be performed at a stone near *Kilmacrenan*.‡

* Martin's Description of the Western Islands, p. 9. † Ibid. p. 241.

‡ Gough's Camden, Vol. III. p. 639. The savage character and ideas of these chiefs to the last is described by Speed, p. 263.

And Spencer does not hesitate to affirm, that it was a continued custom amongst the Irish, presently after the death of any of their chief lords, or captains, to assemble themselves to a place generally appointed, and known to them, to choose another in his stead; where, says he, for the most part they do not elect the eldest son, but the next of blood that is the eldest and worthiest. And, on that occasion, they use to *place him upon a stone*, placed commonly upon an hill. In some of which stones, says Spencer, I have seen formed and engraven a foot; which they say was the measure of their first captain's foot; whereon he standing received an oath to preserve the customs of the country, and had a wand delivered unto him by a proper officer, with which in his hand, descending from the stone, he turned himself round, thrice forward, and thrice backward.*

Of the original custom of chieftains standing, on certain great occasions, by a pillar, or at, or upon some great stone, there are also many most antient proofs, on record.

Thus, we are told, that when Abimelech was suddenly elevated to the Regal Dignity, that he was made King, *by the Pillar that was in Shechem*;† which celebrated pillar was the same stone that had been set up by Joshua under an oak;‡ and which therefore was called, as the original words imports, and as it is rendered in the margin of our Bibles, *the Oak of the Pillar*: or as the Septuagint renders it, *the Oak of the Station*.

And even when Saul was made King there was some sort of compliance with this custom; for we read that it was at *Gilgal* that the kingdom was confirmed to him; at which place were the celebrated stones before mentioned, pitched by Joshua, as it should seem, in a circle: and near which was also an altar unto the Lord.

Come, and let us go to Gilgal, said Samuel to the People, || *and renew the Kingdom there*.

And all the people went to Gilgal, and there they made *Saul King before the Lord in GILGAL*: and there they sacrificed sacrifices of peace offerings before the Lord: and there Saul and all the men of Israel rejoiced greatly.

* L'Estrange's ed. of Spencer's Works, p. 203.

† Judges, chap. ix. ver. 6.

‡ Joshua, chap. xxiv. ver. 26.

|| 1 Samuel, chap. xi. ver. 14. 15.

And again at Gilgal it was, that the people were called together after Saul to fight against the Philistines.* At a time when it is very remarkable they were so ill armed and provided with weapons, that none had swords, or spears, except those who were more immediately about the persons of Saul, and Jonathan.+

So again, when Adonijah was by the assistance of Joab and Abiathar intended to be raised to the Throne; and attempted to be proclaimed King of Israel; it was by the *Stone of Zoheleth*, which is by Enrogel; † where he assembled his brethren and friends, and made a great feast on the occasion.

And in like manner, in conformity with this sort of more antient usage, even after the building of the Temple, we are told, that Jehoash, after he had been preserved from being slaughtered in his infancy by Athaliah, and had been some years secreted by the Priest Jehoida in the House of the Lord, when at last he was brought forth to recover the kingdom, *stood by a Pillar*, AS THE MANNER WAS, *and the Princes and those that blowed the trumpets by him*; ‡ and there he took the oath, and had the crown put upon his head.

And Josiah, when, on a most remarkable and solemn occasion, he had renewed to the Jews the knowledge and the teaching of the law; in a great assembly of the nobles, and of the people in the Temple, || *stood by a Pillar, and made a Covenant before the Lord.*

And as we have this testimony concerning the usage, of standing by a *Stone, or Pillar*; so have we also testimony concerning the solemn use of *Stone Circles*.—For Cæsar has told us, concerning the Gaulish Druids, “whom he says were imitators of the British “Druids, and derived from them their customs and science;”** that at a certain time of the year “they sat in a certain *Consecrated Place*: “to which all that had controversies came from every part around, “and submitted to their judgments and decrees. And that they “determined concerning all disputes, publick and private; concerning murder; concerning the rights of inheritance; and concerning the boundaries of land.”

* 1 Samuel, chap. xiii. v. 4. + Ibid. ver. 22. ‡ 1 Kings, chap. i. ver. 9.

§ 2 Kings, chap. xi. ver. 14, 17. || Ibid. chap. xxiii. v. 3.

** De Bello Gallico, lib. vi. sect. 13.

And Epiphanius, who was born and lived in Syria, also describes an *open Cirque*, as a place of prayer, formed by the antient Samaritans; (which *Cirque* is with great propriety referred to, by the author of the *Louthiana*.)*

And it ought by no means to be forgotten, that Homer, in his fine description of the Shield of Achilles, represents the elders of a nation, (when assembled on occasion of a murder, and to decree whether a fine should be allowed in such an instance, or not;) as sitting in a ring, on stones, (or at stones) in a sacred place. Which description Pope thus paraphrases, and almost turns into burlesque,

On seats of stone within the sacred place,
The Rev'rend Elders nodded o'er the case;
Alternate, each th' attesting sceptre took,
And rising solemn each his sentence spoke.
Two golden talents lay amidst, in sight,
The prize of him who best adjudged the right.

Iliad, book xviii. l. 535.

But whoever takes the trouble to consult the original, will find a much more dignified description; which, whilst it agrees with the use of the circle of stones on these occasions, on the one hand; agrees, also on the other, with an antient custom that has passed over into America, and is preserved amongst several of the Indian nations, of delivering a sort of sacred sceptre, in regular order, to him who was to speak in council: for the literal translation † of the lines in Homer, is

Κήρυκες δ' ἄρα λαὸν ἐρήτηνον αἰ δὲ γέροντες
Ἔβητ' ἐπὶ ἕστοισι λίθοις, ἱερῶ ἐνὶ κύκλῳ
Σκηπτῆρα δὲ κηρύκων ἐν χερσὶ ἔχον ἠεροφάνων,
Τοῖσιν ἐπιτ' ἤσαν, ἀμοιβηδὶς δ' ἐδίκαζον.
Κεῖτο δ' ἄρ' ἐν μέσσοισι δόδο χρυσοῖο τάλαντα,
Τῶ δόμεν, ὅς μετὰ τοῖσι δίκεν ἰθύντατα εἶπη.

The Heralds at length appeased the populace. And the Elders sat ON (or at) ROUGH HEWN STONES, within a SACRED CIRCLE. And held in their hands the sceptral rods of the loud proclaiming Heralds.

* *Louthiana*, book iii. p. 10.

† *Iliad*, lib. xviii. ver. 503, &c.

To which (or on receiving which) they then rose from their seats; and in alternate order gave judgment: whilst in the midst lay two talents of gold, to be bestowed on him, who, WITH THESE, should pronounce the rightest sentence.

That is, who *on receiving the sceptral rod* should propose the best Decree.

And as to the Americans, Cadwallader Golden* tells us; that, at a conference, the Sachem, or Indian Chief who presides, has a *bundle* of small sticks in his hand: and as soon as the speaker has finished any one article of his speech, he gives a stick to another Sachem,† who is particularly to remember that article; and so when another article is finished, he gives a stick to another, to take care of that other; and so on.

Exactly similar to which, is the account given by Hennepin of the Iroquois;‡ amongst whom their President, or Speaker, in the midst of an assembly consisting of forty-two old Indians, having several little pieces of wood laid on the ground before him, took up each of them in due order, and held it in his hand, as long as he was answering to each particular article of the proposals that had been made.

This holding of the *sticks*, surely seems exactly conformable to Homer's Elders receiving the Herald's sceptral rods, and then with them in the hand, beginning each to pronounce judgment.

And I must add, that as all these assemblies seem to have been held by the Chieftains sitting in a circle; so there is an account in Picart's Religious Ceremonies, § of the manner in which the Calumet, or

* See his curious Account of the Five Indian Nations of Canada, p. 100.

† Consistently with the account of the rods here mentioned by *Colden*, in Canada, Beverley in his History of Virginia, p. 157, informs us, that the native Indians of Virginia had a tobacco pipe, bigger than those for common use, in each community; adorned with wings and feathers of birds, and other ornaments; and that when strangers came amongst them, either as friends or enemies, they filled this pipe with tobacco, before the face of the strangers, and lighted it; and the chief Indian took the pipe, and taking two or three whiffs, presented it to the hands of the chief stranger, who, if he came in peace, took it, and presented it to the next man of the district: but if it were refused, it was a sign of war. An account, which it is surely almost impossible to read without bringing to mind the origin of the use of the Caduceus of Mercury.

‡ Hennepin's new Discovery of a vast Country in America, p. 58.

§ Religious Ceremonies, Vol. III. p. 93, and Pl. I. p. 73.

Pipe Rod, passes from hand to hand, in such a circle, in an assembly of the *Canadian*, and *Mississippi Indians*, previous to their going to war, or undertaking any great enterprize : and also an account of a Calumet dance, at the same time. And he has given us two representations ; one of this Missisippian Calumet ; and one of the Virginnian Calumet.*

And that the holding these pipes, and rods, in their hands was designed to assist and strengthen the memory on the occasion, by a certain association of ideas, may be concluded, not only from the account given by Cadwallader Colden ; but also from a usage which we find still retained by other barbarous Indians, in the South Seas. For Mr. Forster informs us, that *Mahine*, or *Hedeedee*, who went once round the South Pole with Captain Cooke, and himself ; made use of a bundle of small sticks as a journal.†

To return to other proofs of Elders, and Senators sitting on stones (or *at stones*) in council, or to decree justice, in the most antient times ; we have still another most remarkable one, in Homer :

When Alcinous assembled his council ; they sat, we are told, by the sea side ; (and therefore manifestly in the open air) ἐπὶ ἔσπεροις λίθουσι, ‡ which I should translate, *on plain hewn stones* (or rather *at plain hewn stones*) ; though Pope is pleased to translate it,

Then to the Council seat they bend their way,
And fill the shining Thrones along the bay.

Other instances might be produced. And those who wish to pursue this inquiry further, will find several curious facts mentioned by various authors.

They will also find, in antient writings, many tending to shew even the continuance of the use of stone circles, on various occasions ; as of public inaugurations, and of councils ; even so late as

* See also Hennepin's Discovery, p. 95.

† Forster's Voyage, Vol. I. p. 530, 601, 311, 421, &c. ‡ Odyssey, book viii. line ε.

§ That the preposition ἐπὶ with a dative case, signifies full as properly *at*, meaning, *at a certain station* ; as *on*, or *upon* ;—is obvious from a variety of passages that might be cited ; as ἐπὶ ποταμῷ, and ἐπὶ θαλάσσει, cited by H. Stephens from *Thucydides* ; and as ἐπὶ θύραις, and ἐπὶ θύραις, cited also by him, from *Homer*, and *Aristophanes*.—See H. Stephens, fol. i. p. 1210, 1211 ; and Vigerus de Idiotismis, p. 602.

the fourteenth century;* in the northern parts of Germany; in Sweden; in Denmark; and in the Western Isles.

Such Circles also, without any positive record of their use, are to be met with in Iceland; in Shetland; and in the Isle of Man; where they are even called by a name that plainly indicates a *Forum*, or place of Justice.+ And in the Marquisates of Brandenburg, the Dutchy of Brunswick Lunenburgh, and other parts of Germany.‡ And in Scandinavia,§ and in Norway they are to be met with again.

All which only tends to prove, that the Norwegians, and Danes, and Germans, derived similar usages with the Britons, from the same remote, common, and primitive ancestors: but does no more lead us to conclude that any of these structures in Britain (several of which appear in parts of the island where the Danes never came) were the works of the Danes; as some writers have hastily supposed; any more than that those in Scandinavia, and Norway, and Germany, were the works of the Britons.

They were merely works, consistent with the usages, of those primitive ancestors, from whom the people, in all these several countries, were equally descended.

And there is a circumstance, the mention whereof ought not to be omitted, on this occasion; which is, that in conformity with the idea of *Circular stones* being originally, by antient custom, properly connected with the administration of justice; the Phareans, in Greece, in the middle of their *Forum*, erected thirty cubes of stone round their *Mercurius Agoræus*.||

The Circles designed particularly, by the Britons, for the superstitious *Turnings round*, and *Dances*, cannot perhaps at this distance of time be precisely ascertained, or distinguished, from the others appropriated to the administration of justice. But these superstitious observances themselves, are well known to have continued in use, amongst the descendants of the antient Britons,** even down to very late ages.

* Borlase's Antiquities of Cornwall, p. 205. Wormius, p. 87, 90.

† Worm. Mon. Dan. p. 68. Keyser, p. 78. ‡ Borlase's Antiquities of Cornwall, p. 193.

§ Dalhbery, L. iii. tab. 280.

|| Pausan. Acha, lib. vii. c. 22.

** See the Antiquities of Cornwall, p. 127, 128, 129, 130, 151, 194.

And it deserves to be well noticed, again on this occasion, what a striking and remarkable conformity is to be found in the manners of all those called aboriginal people, in every part of the earth, as to some certain usages; which therefore shew their original connection with the few patriarchal families who first repeopled this globe; whose superstitions were increased to an enormous height, even before the days of Abraham.

For whilst we meet with these Circles of stones in so many parts of Europe; and are acquainted with such striking remains of superstitious *Turnings round*, and Dances, in England, Scotland, Ireland, and in many Northern parts of Europe; we find nearly the same sort of observance actually kept up, till within a very few years, amongst the Virginian Indians, in America.

Beverley informs us,* concerning them; that their dancing is sometimes performed by a great number of people: the dancers forming a ring, and moving *round a circle of carved posts*, that are set up for that purpose; each dancer having his rattle in his hand, or his bow and arrows, or his tomahawk. They also dress themselves up, for this purpose, *with branches of trees*. And thus they proceed, dancing and singing, with all the antick postures they can invent.

So, concerning the customs of the Indians of Canada, and the Missisipi, La Houtan informs us, that on their reception of ambassadors, or foreigners, who come with the *Calumet*, or *Pipe of Peace*; some young people advance forwards, and range themselves in *an oval form*: and as the foreigners advance forwards, they all dance together, and make another *oval*, round the officer who bears the *Calumet*. And this dance continues about half an hour: after which they conduct the foreigners to the banquet. †

So a strange ceremony of the Caribbee Indians is described; ‡ when their Priests pretend to inspire them with courage. Which ceremony consists, in their singing and dancing *in a Circle*, with great agitation; after which, three or four of their Priests rush into the circle, and with a gourd bottle tied at the end of a stick, or with a long reed filled with tobacco, blow upon them.

* History of Virginia, p. 191.
monies, Vol. III. p. 91.

† See an Account of this in the Religious Ceremonies, Vol. III. p. 162.

In other more civilized countries also, the strange Circular dances, and Turnings round of the *Dervises*,* still retained as a sort of religious ceremony in the East, seems to have been derived from most antient superstitious rites, in those countries, in use long before the time of Mahomet; as well as the reverence for the Caaba at Mecca; which we know was an object of superstitious regard, numerous ages before Mahomet was born.

And whilst we read of the badges, which the Indian Priests, and Dancers hold in their hands, together with branches of trees, on performing these ceremonies in America; it is almost impossible not to call to mind the Druidical misletoe, and oak branches, used by the Britons, on all solemn occasions, as well as their stone Circles.

On the whole; perhaps we shall not err from the truth, if we conclude those Circles, *where the stones are placed uniformly at equal distances, and are of no great magnificence in point of bulk; though too high to sit upon; to have been designed for these sort of Celebrations: whilst those, where the stones are carefully placed at unequal intervals, with two opposite ones placed nearly in a meridian line; and those other circles which have Pillars, obviously placed with great care towards the east and west; were designed for the more important purposes of Astronomical Observations: and that those which have an high stone in the centre of many smaller ones, were for Public Assemblies, and Councils: and those, where all the stones are rather low; for Courts of Judicature.*

A fine Circle, consisting of thirty-eight stones, near Clenenny, in North Wales, not far from Penmorva, which is only just mentioned by Mr. Pennant; † deserves to be well examined.

And so also does a Druidical Circle of stones in the shire of Angus, in Scotland, near the celebrated camp of Readykes, ‡ on Garnie Hill; in the neighbourhood of which distinguished spot, it seems evident from a variety of circumstances most fully considered by the Earl of Buchan, the war with the Romans was put an end to, by the

* Thevenot, book i. chap. 40. Ricault, book ii. chap. 13. Tournefort, in his Letter xiv. Religious Ceremonies, Vol. VII. p. 109. See also Motraye's Travels, Vol. I. p. 236.

† Tour in Wales, Vol. II. p. 189.

‡ See a slight plan of the Circle, with that of the Camp, from Lieut. Gen. Melvill's Drawings, in Gough's Camden, Vol. III. p. 409.

signal victory obtained by Agricola over Galgacus, and the Caledonian army.

And as to *Inauguration Circles*, and those for *Legal Solemnities*; one has been already just mentioned, as still preserved by its remote situation in one of the Hebrides, call *Lewes Island*, or *Long Island*.

We find there, at *Classerness*,* first, thirty-nine stones, 6 or 7 feet high, and about 2 feet each in breadth, placed in the form of an avenue, the breadth of which is 8 feet, and the distance between each stone 6. There is a single stone set up at the entrance of this avenue; and at the other extreme part, which is the south end, stands a Circle of twelve stones, of equal distance, and height, with the former thirty-nine. In the centre of this circle is one great stone 13 feet high, of an odd irregular form, like the rudder of a ship; concerning which the tradition of the country still is that, in the times of *Heathenism*, the Chief Druid, or Priest, stood near this stone, from whence he spoke to the surrounding people. On the outside of this circle, there are four stones standing towards the west; of the same proportions, and at the same distances; and, in like manner four to the east; and four towards the south.

And about a quarter of a mile's distance from these, there is another circle of high stones.

There are also some circles of stones, both such as are small, and such as are of large dimensions, in the island of *Tire-iy*.+

And as in the instance of *single stones* of memorial, we have compared those in England, and Scotland, with certain remains in Ireland; so here it ought not to be omitted, that on a Rath, or artificial hill, in the county of Roscommon, in Ireland, there is a Circle of ten stones; which from representations that have been given of it, ‡ seems to have been of the kind designed merely for superstitious dancings, and turnings.

About half a mile west of Winterborn Abbey in Dorsetshire, also, are the remains of a Druid Circle of stones; which from the smallness of its dimensions, and the nearly equal distances originally of

* Martin's description of the Western Islands, p. 9. + *Ibid.* p. 270.

‡ See one in Gough's Camden, Vol. III. p. 596; and Pl. XLIII. fig. 10. p. 529.

all the stones ; and from their inconsiderable magnitude,* appears plainly to have been in like manner a circle merely for superstitious dances, and turnings. There are at present nine stones, placed in a form more elliptical than circular, for one diameter is 27 feet, and the transverse diameter $25\frac{1}{2}$: their distance from each other is somewhat unequal, but generally about six feet. And as there is a vacant unmeaning space on the north-east, it seems as if three more stones, in that part, had completed the whole number, at very nearly equal distances. One of them is seven feet high, and another six ; the rest not above three. It is remarkable, however, that two of these stones stand nearly east and west. And their very high antiquity, and superstitious designation, seems to be confirmed, by the near adjoining situation of a vast number of barrows.

There are some other *great* Circles of stones well known, † whose peculiar forms might tend to illustrate all that has been just said ; but which have moreover certain appendages to them, that cannot well be understood, without the consideration of some curious circumstances that will be more fully considered in subsequent observations: it will be proper, therefore, to defer the enumeration of them, till all those additional peculiarities have been a little explained. And it is only proper to add here, that whatever the designation of all such various kinds of Circles of columnar stones was, there is one circumstance which with us, in this country, is an unquestionable proof of their great and high antiquity ; and that is ; that, in some places, the antient *Roman ways* are found to cross through, and to mangle some of these Circles, ‡ in various directions : which could never have been the case, unless the erection of such Circles had been so long prior to the existence of such roads, that all the reverence for them was

* See an account of their measures, and forms, in the Gentleman's Magazine for 1768, p. 112.

† Boskednan Circle in Gullval, in the Antiquities of Cornwall, p. 198, Pl. XV. fig. 2.

And those called, The Hurlers, in the parish of St. Clare in Cornwall, p. 199, Pl. XVII. fig. 6.

And the curious cluster of Circles at Botallek, in Cornwall, p. 199, Pl. XVI.

And the very remarkable Circle of six stones in Denmark, which is described by Wormius ; and represented by Borlase, p. 210, 188, do also deserve much notice.

‡ See Borlase's Antiquities of Cornwall, p. 197.

lost, even when those roads themselves were first constructed by the Romans.

Another confirmation of their high antiquity, and solemn use also, is, that their name in the Erse, is *clachan*; and that to this day, the phrase for going to church amongst the Highlanders is, to go to *clachan*.* Whilst the church of Benachie is included in one of these very circles; as are others in Scotland; which seems to have been the effect of choice, not chance: the founders designing to induce the Pagan inhabitants the more readily to attend on the doctrines of Christianity; by building churches, on the very spots, where they were wont to celebrate their antient and most solemn rites.

Thus near to the village of *Oldeer*, not far from Inverugee, where an abbey was founded in 1218, a Druidical Circle of stones is found, still existing pretty entire, on an adjacent hill; having three of the stones remaining in the midst, which had composed a cromlech, or altar, of an enormous size.+ And near this are still to be discerned vestiges of cells, or huts, which the neighbouring people call *Picts' houses*; and which probably were the residence of attendant Druids.

* Cordiner's Antiquities, p. 34. Pennant's Tour in Scotland, 1769, p. 232.

+ Cordiner's Antiquities, p. 44.

CHAPTER IV.

CONCERNING SACRED CIRCLES, WITH ALTARS OF OBLATION.

HAVING, from so many concurring facts, derived a certain degree of information, with regard to the original use of those various Circles of *Druïdical stones* (as they are called) which were designed for mere civil purposes; it is now time to proceed to the investigation, still more particularly, of those more magnificent Remains, which there can be no doubt were originally parts of structures destined to superstitious, and what were deemed most sacred rites, and ceremonies.

As of this destination there can exist no doubt; it being a fact allowed on all hands; it would be both unnecessary, and unwarrantable, here to repeat, what has been so judiciously, and ingeniously, and in most respects so satisfactorily, observed, and written, concerning these wondrous piles, by Rowland, Stukeley, Borlase, and Wood. I shall therefore confine myself chiefly to such *new* and additional observations, as may tend, without invalidating the material substance of their conclusions, to afford still further light.

The most perfect and stupendous structure of this kind yet remaining, may however, I trust, justly be referred to, in order to explain in a more precise manner, the whole of them.

Stonehenge, in Wiltshire, will therefore be instantly present to every one's mind on this occasion.

It has been so often drawn, and represented in engravings in one entire group (in which it always does, and must ever appear an heap of confusion), that both to avoid copying, and repetition; and in order to elucidate the explanation of it still more fully; I shall venture to take quite another method.

And therefore, referring those who wish to see views of the whole together, to the many engravings already published (most of which, though differing so much one from another, in consequence of their being taken from different stationary points, have yet a degree of

authority, and faithfulness, that does not deserve the censures bestowed on some of them); referring for more general representation of the *whole* to such prior engravings; I shall beg leave to confine my description, in the first place, to a mere plan of the aggregate ruin, as it was in Mr. Wood's time. Then, to two views of the most important and detached distinct parts; after that to a plan of the whole, represented as it appears clearly to have been originally; and lastly, to one or two views of the great *Trilithons*, as they once stood; and of that which has fallen, in its fallen state.

Pl. VI. fig. 1. represents a plan of all the stones of the body of this majestic structure, that remained on the spot in 1740; both those which were fallen down, and those which were still standing in their original position.

This plan is copied from Mr. Wood's actual Survey; and, being most accurate, requires nothing to be added to it, or substituted in its room, in this respect; notwithstanding I may venture to differ from him, in some particular conclusions.

I chanced, the first time I visited this structure, to approach it by moonlight; being later on my journey in the evening, than I intended. This, however, was a circumstance; advantageous to the appearance: insomuch, that although my mind was previously filled with determined aversion, and a degree of horror, on reflecting upon the abominations of which this spot must have been the scene; and to which it even gave occasion, in the later periods of Druidism; yet it was impossible not to be struck, in the still of the evening, whilst the moon's pale light illumined all, with reverential awe, at the solemn appearance produced by the different shades of this immense group of astonishing masses of rock; artificially placed, impending over head with threatening aspect; bewildering the mind with the almost inextricable confusion of their relative situations with respect to each other; and, from their rudeness, as well as from their prodigious bulk, conveying at one glance, all the ideas of stupendous greatness, that could well be assembled together: whilst, at the same time, the vast expanse of landscape from this summit of an hill, added an idea of boundless magnificence, similar to that produced by a view of the wide extended ocean.

Surely, there can hardly be a more painful reflection ; or one that more tends to cause an honest mind to shudder with indignation ;— than that by the perverseness and blindness of the human heart, such grand associations of ideas should ever have been perverted to impious, and to idolatrous purposes ; instead of being directed to the worship and honour of HIM, who created the whole expanse from hence surveyed ; both above, and beneath ; who made sun, moon, and stars ; heavens, and heavens of heavens ; worlds of inconceivable glory.

It is an happy circumstance, that we do not, at this distance of time, with precision, understand *what* the abominations here practised, in the latter most corrupted ages of Druidism were ; though the first original designation, in conformity with Patriarchal usages, is manifest enough.

It is not to be lamented that we are so far ignorant ; and it would be serving but an ill purpose, to endeavour to bring them to light again ; or to strive to catch ideas of them, by the wild guidance of conjecture ; as has sometimes been endeavoured.

I shall beg leave, therefore, here to draw the veil : and in these observations only to elucidate as much as appears most positively clear, from the most antient records ; and as is indeed, in a degree, free from any necessary concern with those gross abominations.

To do even this, however, I must first endeavour to make the whole of the fabric plainly intelligible.

Those stones, in the plan referred to, Pl. VI. fig. 1. the proportions and dimensions of whose bases are represented *black* ; are such as are still standing upright, except only the one in the middle marked (*y*).

And amongst these ; the stones in that part of the outward circle, that is on each side the letter (*a*), are the very stones, some whereof are shewn, as they appear on approaching them, in Pl. VII. fig. 1. having the great impostes still remaining upon them.

They are, in general (as far as such rude masses can be reduced to any scale) between 6 and 7 feet broad ; between 3 and 4 thick ;* and about 14 in height ; and, when they were all entire,

* See a confirmation of the truth of these rough measures, and computations, in Wood's exact Survey of Stonehenge, p. 63.

plainly formed (as appears from the uniform proportions of what remain), a great circular inclosure; of about 97 feet in diameter: consisting of 30 upright rude stone pillars; and of 30 imposts, each of which was about 10 feet long, or a little more; and about 3 feet thick. The intervals or intercolumniations between these stones was only about 3, or sometimes near 4 feet; but amongst these, the interval at (*a*) was rather wider than the rest; and formed a sort of principal entrance to this august structure. The whole construction manifestly shewing, how even very small dimensions, provided there be but a sufficiently obvious scale for measuring the greatly different proportions of the several parts, may convey effectual ideas of magnificence, even detached from any consideration of the additional circumstance of grandeur, that is conveyed by the vast bulk of each single stone.

The stones in the plan, which are marked with dots, shew such as have long been thrown down, but yet still remain near their original places. Whilst, by the blank intervals, it plainly appears, that some others have been carried away.

There remain 17 upright pillars of this outward circle standing; and 7 now lying on the ground, either whole, or in pieces; there remain also 6 of the imposts in their places. But all the rest are carried off and lost.

They have all plainly in a degree been wrought with a tool: for, in order to join the upright pillars to the imposts more effectually, there is formed, on the top of each pillar, a sort of tenon, of the form of half an egg; and about $10\frac{1}{2}$ inches in diameter; which was made to fit into a corresponding mortise in the impost. And the rude pillars themselves, on examination, have been found to be placed at bottom, in a kind of socket, dug in the chalky soil; and having small flints carefully rammed in, between the stone and the sides of the socket.

About 9 feet nearer towards the centre; that is, 9 feet from the inside of this exterior Circle, appear the remains of a second and interior Circle, of smaller stones; which are of about one half of the dimensions of those of the outward circle. And, (from the proportion of the distances of those that remain, as well as from their

situation,) they appear to have been originally twenty-nine* in number.

Only nine of these are now left standing in their proper places : and whether they ever had, or had not, imposts on them, is not at present to be determined. But it is remarkable, that whereas the stones of the outward Circle are of a lightish colour, being by some Observers deemed to be of the same kind as the *Grey-Weathers* on Salisbury Plain ; these, of the inner Circle, are of darker hue, almost inclining to black : which variety and contrast, must have added much to the beauty of the original work.

After passing the remains of these two great outward Circles ; between which the circular walk seems to have been nearly 300 feet in circumference, and to have afforded an awful view of the interior structure ; we come to the most striking part of the whole : which is, at the distance of about 13 feet more inwards ; consisting of a large portion of an oval, about 52 feet in its shortest diameter, and a few feet more in its longest ; a part of whose circumference was formed originally by at least *five*, (or as appeared to me, and as I much suspect, by *seven*) massy combinations of huge fragments of rock, in the form of exceeding high altars ; placed one at the end, and the rest on each side of the longest diameter, fronting the principal entrance (*a*).

These Dr. Stukeley calls *Trilothons* ; because they were composed of three great stones each : and stand each quite apart ; and not joined to, or appearing to have any annexation to each other, like the pillars and stones in the outward circle.

Three of these remain entire ; and are marked in the Plan (1, 2, 3) ; but the rest are thrown down, and demolished ; except that there is one of the supports of the fifth Trilothon left standing at (5). And except also, that of the Trilothon marked (4), (which was the highest and largest of all) ; *one* of its pillars also remains partly standing ; although leaning forwards, in a sloping position ; being so supported, by a smaller stone pillar of the interior oval, just before it.

This vast, rude remain of the highest Trilothon, is about 22 feet in length to its top ; whereon still exists the great tenon, that fastened

* See this ascertained by Mr. Wood, p. 64.

it to the impost above. Its fellow supporter is thrown down ; and lies, just by, in two great pieces ; whilst the impost itself has fallen quite across the long black stone marked (y) ; which was placed a little before the foot of this high altar ; and in this position it for some years remained, so nicely balanced, as to form a sort of rocking stone.

All these great Trilothons, may be plainly observed to have been so constructed, that those on each side the oval, were made respectively to increase in height, the further they were from the entrance at (a) : whilst this (whose leaning pillar is left,) which fronted the entrance, was highest of all.

The first pair, that at present have any existing traces of their original form left ; namely those marked (1 and 5), being about $16\frac{1}{2}$ feet in height.

The next, marked (2 and 3) ; being about $17\frac{1}{2}$ feet in height.

And the middle one, marked (4), being, as before mentioned 22 feet high.

In the front of this last ; at the distance of about 12 feet ; was placed, on the very ground, and partly sunk into it, a great black stone (y) : about 16 feet in length, and 4 feet wide, and about 20 inches thick : which seems to have marks of burning upon it still remaining ; and is of a quite different, and harder kind of stone, than the rest ; as being designed to resist the effects of fire.

The leaning pillar of the great and highest Trilothon ; and the two Trilothons, on each side, remaining entire, when I visited the spot ; are represented by themselves, in Plate VII. fig. 2.* for a

* The drawing was made in the year 1787 : and long since these sheets were written, there has fallen, in the year 1797, one of these so curious *Trilothons*. It is the most western one, or that, which was (of the five), the second, on the right hand, as you advance towards the upper end.

An account of its fall was given to the Society of Antiquaries, in a letter from M. G. Maton, Esq.

The sound of the fall was so great, as to frighten the horse of a cart, then going on the road at a distance. And I have lately been informed, by the present Lord Bishop of Durham (as the only probable account for its falling), that a little time before his Lordship was first advanced to the See of Salisbury, the then Dutchess of Queensbury wished to have this Trilothon removed, and had caused labourers to dig deep, at its foundations, for that purpose. But that finding their labour ineffectual, they had desisted ; and had filled up

clearer explanation of this description. And are shewn as detached, and free from all the other stones; which are in this drawing purposely left out, to avoid confusion.

And whilst the vastness of their bulk is so obvious; it cannot but appear most remarkable; what a very small interval there is between the two great supporters of each Trilothon. It is not more than 21, or 22 inches: though the width of each stone supporter, is at least about 7 feet; or $7\frac{1}{2}$.

This narrow interval therefore seems plainly to indicate, that the void space, between the two stones, could neither have been designed for a seat; as some have supposed:—or for any entrance;—or for *passing through*, for any superstitious purposes; (as others have imagined.)—But that plainly, each structure of these *five* was intended indeed solely for *an high raised basis*;—an altar of oblation;—a sort of *Table for offerings*;—according to what we read of antient Ceremonies concerning *Offerings*; and are informed is still in use, amongst barbarous, and Gentile nations.

Nor is it any objection to this idea, that these Tables, or Altars of Oblation, and Offering, were so very high, that they could not be ascended except by ladders: for we find that they are of such kind of height still, amongst such barbarous and idolatrous people,

the excavation. Perhaps the loose earth, thus slightly thrown back, might afford an opportunity to successive wet, and frosts, to do that which the labourers could not do; and, by the swelling and expansion of the solid earth, on the other side, to force the uprights from their perpendicular position; and so at last to fling them down.

On this fall there was discovered a still further proof of the very rude construction of this stupendous pile; though so much advance towards art had been made, as in concurrence with abominable superstitions, to break in upon antient primæval institutions. For it was not only, like the other Trilothons that had previously been thrown down, found to have mortesses and tenons, to join the uprights to the impost: but the mortesses were here quite unequal: the one 13 feet deep, and the other only 9 feet deep.

The uprights appeared to have been decayed a little by time, and weather; and were somewhat smaller beneath than at the upper parts. They were about 22 feet high. Besides which they had been buried from 4 to 6 feet in the ground; the depths of the two, however, were not exactly alike: insomuch that, the foundations seemed to have been cautiously so prepared, as to make both even when they were set up.

This Trilothon appears in Pl. VII. fig. 2. just as it was standing in the year 1787, when I visited the spot. It is that near which is seen the figure of a man, designed as a scale to measure its apparent height.

as do yet retain, in consequence of their having been so long separated from the rest of the world, the most primitive usages.

And indeed that altars were ascended by ladders, in the most ancient times of the world, even before the giving of the Law of Moses, we may be assured, from the caution, and express command given, in the Divine Law, in contradistinction to all former idolatrous, and Gentile usages.

Thou shalt not (says the Holy Law of God) *go up by steps, unto MINE ALTAR.**

And it deserves to be remarked, that in this passage the original words *ἐν ἀναβαθμίῳ*, used in the Septuagint, exactly convey the very idea of the steps of a ladder.†

Amongst remote, and barbarous people, who have been cut off, for many ages, from all correspondence with the rest of the world, we find preserved almost uninterruptedly (though mixed perhaps with additional horrible idolatrous corruptions), the practices, in point of form, of those Patriarchs, in the first ages of the world: who had so soon and so grossly departed from the worship of the most Pure, and Perfect, and Holy God, The Creator of all, as to have given occasion to the calling of Abram to depart from amongst them.

And as to such usages, and practices, we have many curious, and indeed dreadful elucidations, in the late voyages to the South Sea; and that from persons who were even eye witnesses to them:—but who, a serious mind must think, ought to have used more caution in attending such horrible observances: and ought to have related them with more serious animadversions, and observations, than have been made, either by themselves, or by those who have communicated them to us. For most undoubtedly nothing can be so dreadful, and pernicious, as the remotest, even silent assent to, or connivance at, any part of idolatry.

If some investigation of its horrid history be unavoidably necessary for the full elucidation of the truth contained in Holy Scripture; and for the better illustration of the history of the dispensations of the Divine Providence; yet surely, at least, an avowed abhor-

* Exodus, chap. xx. ver. 26.

† Of this opinion plainly was H. Stephens. See Vol. I. p. 640. For *Ἀναβαθμίς* is even the diminutive of *Ἀναβαθμός*.

rence of every thing relating thereunto, and an heartfelt manifestation of a deep sense of the abomination thereof, is the duty of every servant of God; and especially of every Christian, who is at any time led either to investigate, or to explain, such matters as relate to the times of Gentile darkness.

The elucidations I refer to, are to be met with in Captain Cook's voyages.

Amongst other parts of the description of a most horrible ceremony, when Captain Cook was present at an human sacrifice, of a man that had been killed, to implore assistance against Eimeo, a neighbouring chieftain; which ceremony was performed at the great Morai at Atahooroo, and attended by Otoo, King of Otaheite; we are told;* that after the corpse of the man, who had been sacrificed, was interred, a dog they had brought with them was killed, by twisting his neck, and suffocating him. The hair was singed off, and the entrails taken out, and thrown into the fire, where they were left to consume. The heart, liver, and kidneys, were roasted, by being laid on hot coals; and the body of the dog, after being besmeared with the blood, which had been collected into a cocoa-nut shell, and dried over the fire, was, with the liver, &c. carried and laid down before the priests, who sat praying round the grave. They continued ejaculations over the dog for some time; while two men, at intervals, beat on two drums very loud. As soon as the priests had ended their prayers, the carcass of the dog, with what belonged to it, were laid on a *WHATTA*, or scaffold, about six feet high, that stood close by, on which lay the remains of two other dogs, and of two pigs, which had been lately sacrificed; and which, at this time, emitted an intolerable stench.†

When the dog was put upon the *Whatta*, the priests and attendants gave a kind of shout, which closed the ceremonies for the present. The day being closed.

The next day, however, a pig was killed with many superstitious forms; and after its entrails were burnt, the body and its liver

* Cook's last Voyage to the Pacific Ocean, Vol. II. p. 30, 35, 36, and 42; 205.

† P. 38. See also, as to the use of these *Whattas* (or *Ewattas*, as they are sometimes called), Hawkesworth's Voyages, Vol. II. p. 168, 256, 257.

also, &c. were put upon the same *Whatta*, or scaffold, where the dog had been deposited.

Here we find the carcass of the dog *lifted up*,—or *placed on high*,—on an altar,—on occasion of an horrid dæmoniacal sacrifice: and that of the pig placed in the same manner. Only in this instance, as in almost all other Indian usages, we find *wood* substituted instead of *stone*.

Again, we have the account of a *Morai*, or place of Sacrifice, in the very spot, where poor Captain Cook was himself either lifted up, and worshipped; or (as the event too sadly proved) desecrated, in the Sandwich Islands. I will give the sad account in the words of the Editor of his Voyage.*

“ Before I proceed to relate the adoration that was paid to Captain Cook, and the peculiar ceremonies with which he was received on this fatal Island, it will be necessary to describe the *Morai*, situated, as I have already mentioned, at the south side of the beach at Kakooa. It was a square solid pile of stones; about 40 yards long, 20 broad, and 14 in height. The top was flat, and well paved, and surrounded by a wooden rail, on which were fixed the skulls of the captives, *sacrificed on the death of their chiefs*. In the centre of the area, stood a ruinous old building of wood, connected with the rail, on each side, by a stone wall, which divided the whole space into two parts. On the side next the country, were *five poles*, UPWARDS OF 20 FEET HIGH, *supporting an irregular kind of scaffold*; on the opposite side, toward the sea, stood two small houses, with a covered communication.

“ We were conducted by Koah to the top of this pile by an easy ascent, leading from the beach to the north-west corner of the area. At the entrance, we saw two large wooden images, with features violently distorted, and a long piece of carved wood, of a conical form inverted, rising from the top of their heads; the rest was without form, and wrapped round with red cloth. We were here met by a tall young man with a long beard, *who presented Captain Cook to the images, † and after chanting a kind of hymn*,

* The present *Lord Bishop* of Salisbury, Dr. Douglas. See Cook's last Voyage to the Pacific Ocean, Vol. III. p. 6.

† Horror!—Horror!—Horror!—can an Englishman, and Christian, read this without the utmost indignation?

“ in which he was joined by Koah, they led us to that end of the
 “ *Morai*, where the five poles were fixed. At the foot of them were
 “ twelve images ranged in a semicircular form, and before the
 “ middle figure stood AN HIGH STAND OR TABLE, *exactly resembling*
 “ *the WHATTA of Otaheite*; on which lay a putrid hog, and under it
 “ pieces of sugar cane, cocoa nuts, bread fruit, plantains, and sweet
 “ potatoes. Koah having placed the Captain under this stand, took
 “ down the hog, and held it toward him; and after having a second
 “ time addressed him in a long speech, pronounced with much
 “ vehemence and rapidity, he let it fall on the ground, and led
 “ him to the scaffolding, which they began to climb together, not
 “ without great risk of falling. At this time we saw, coming in
 “ solemn procession, at the entrance of the top of the *Morai*, ten men
 “ carrying a live hog, and a large piece of red cloth. Being ad-
 “ vanced a few paces, they stopped, and *prostrated themselves*; and
 “ Kaireekee, the young man above mentioned, went to them, and
 “ receiving the cloth, carried it to Koah, who wrapped it round the
 “ Captain, and afterward *offered him the hog*, which was brought by
 “ Kaireekee, with the same ceremony.

“ Whilst Captain Cook was *aloft*, in this awkward situation,
 “ swathed round with red cloth, and with difficulty keeping his
 “ hold amongst pieces of rotten scaffolding, Kaireekee and Koah
 “ began their office, chanting sometimes in concert, and sometimes
 “ alternately. This lasted a considerable time; at length Koah let
 “ the hog drop, when he and the Captain descended together.”

I have added the whole of this sad detail, for the sake of shew-
 ing the nature of these horrible Indian Altars of Oblation; which
 plainly consisted both of the *Whatta*,* on which the putrefied
 flesh lay; and also of the scaffold, on which poor Captain Cook

* As there is no *Whatta*, or *high Altar*, in the instance I am going to refer to, it was not quite proper to add the mention of it, with those remarkable and horrid Ceremonies just alluded to; but it is not beside our purpose, by way of illustration, to mention, that Purchase informs us, the old Florida Indians did, as idolaters, annually make an oblation to the Sun, with great solemnity, of the representation of a stag. For which purpose they chose the skin of the largest stag they could meet with. This they first stuffed with all kind of herbs, then adorned it with fruits and flowers, and *lifted it up*, to the top of an high tree, with its head turned towards the rising sun. And this ceremony was performed every year about the end of February. See Picart's Religious Ceremonies, Vol. III. p. 118.

seems in reality to have been himself made a sort of offering ; or else to have been treated in a manner that conveys a still more dreadful idea.

I cannot but feel many fearful reflections in my mind, on reciting such a tale : and cannot but wish it to be a warning to all future Navigators ; to prevent their compliance with idolatrous rites. For the sake of which *warning* chiefly, I am induced to recite the whole thus at large.

Several other instances of *Whattas*, or raised stages ; or rather of rude Altars, with Oblations, and Offerings ; might be added from the accounts given in Captain Cook's different Voyages : but these are sufficient.

It is, however, even a sort of duty, just to point out, as well as to lament one or two other fatal mistakes, which our valuable, and excellent Navigator fell into amongst these people ; that others may be upon their guard against so sad a snare.

Can any thing be more horrid to the apprehensions of a sincere Worshipper of the One only true God ; than that poor Captain Cook should, by the circumstances in which he was placed, have been induced to *stand by*, and in that manner, as it were, to give countenance to that poor wretched being Omai, (who was then just carried back, after a long abode in this country), whilst he made an open idolatrous offering of red feathers, and of cloth, * to his false gods, on the island of Huaheine : and whilst Omai caused their abominable Priests, at the same time, to pray in the presence of all the people, English, and Indians, to those false gods, for Lord Sandwich, and for the Captains Cook, and Clerke.

Or is it possible to read, without trembling apprehensions of Divine displeasure ; that, some time after, some sacrifices to their false gods, with their usual ceremonies, and with their hymns, and prayers, were performed on the burial of an English seaman? †

Again, how painful is it to be informed, ‡ that when that poor ingenious being *Tupia*, with his boy *Tayeto*, in the midst of their

* The account of this Ceremony, with all its horrible circumstances, may be seen at large in Cook's last Voyage to the Pacific Ocean, Vol. II. p. 93, 94.

† See the whole account in Cook's last Voyage, Vol. III. p. 25.

‡ Hawkesworth's Voyages, Vol. II. p. 307.

darkness, and error, offered, on board the ship, a fish to their supposed Eatua, or god, in gratitude for Tayeto's escape from the Indians who had seized him; that not one soul on board the ship took that fair opportunity of instructing them better. And that on the contrary, on another occasion, our mariners appear even to have remained present,* and almost as assenting to Tupia's idolatrous offerings, and ceremonies.

Let every future Navigator guard against such horrible and fatal compliances, as he values the life and safety of himself, and of those who are with him.

Having mentioned these extraordinary facts, in order to elucidate, by a comparison with primæval usages preserved in other parts of the earth, the nature of our aboriginal remains in this country; and to shew that the great *height* of these Trilothons, or *high Altars, at Stone Henge*, is in reality rather a proof, and indication of their original designation, as Altars of Oblation; than an objection to their having been originally intended for such superstitious purpose; it remains only, in the next place, to be observed, with regard to the interior part of this structure at Stone Henge; that, in the inside of this almost semicircular range of Trilothons, or high bases of Altars; (which are of the same whitish stone, with the outward circular portico); there was again (as in the outward circle), a lesser corresponding range of upright stones; smaller, darker coloured, and even black; somewhat of a pyramidal form; nineteen in number: being each about $2\frac{1}{2}$ feet in breadth; $1\frac{1}{2}$ thick; and near 8 feet in height; only increasing in height, as they approach the upper end, near to the black stone Altar for burning, which lays on the ground.

For the sake of rendering the Great Trilothons more firm, and their form more beautiful, the upright supporters in general may be observed to have been made originally to diminish somewhat in breadth, and thickness, from the base to the top; whilst the imposts were made nearly of the same length as was occupied by the whole base: that is, about 17 feet.

On the summit of one of these, marked (2) in the plan, Lord Winchelsea, and Dr. Stukeley, walked backwards and forwards for a considerable space of time, some years ago; neither of them

* Hawkesworth's Voyages, Vol. II. p. 251.

being willing to yield, in point of courage, to the other. (An odd instance of English oddity).

With regard to the outside of this extraordinary pile, it is to be remarked still further; that at the distance of about a diameter of the structure from its circumference, that is, at the distance of about 100 feet, or a little more, from the outward circular range of stones, is a double bank, inclosing a circular ditch, about 30 feet in breadth; which surrounded the whole in every part, except opposite to the entrance (*a*), on the north-east side. And was so constructed, that the inward bank formed a kind of broad surrounding terrace.

Just where the passage through this terrace was, on the first approach; *there* appears, lying on the ground, on the part corresponding to the inner bank of the ditch, an exceeding large stone, about 20 feet in length, and between 6 and 7 in breadth; which seems manifestly to have been designed for the slaying, and preparing, the victims.

It is marked (*b*), in the second plan; which comprehends the whole of this sacred Circle, as it seems to have been originally formed, with all its outworks. See Pl. VI. fig. 2.

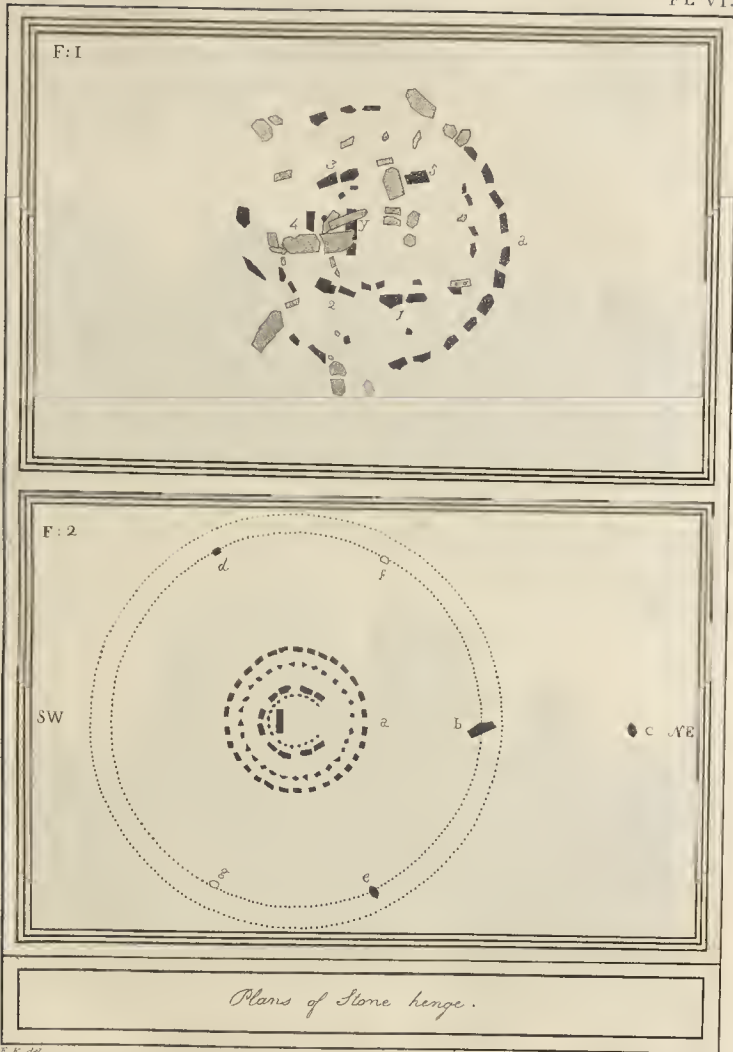
Again; further off; and directly before the principal entrance; is still remaining another large stone, or Pillar of Memorial, about 17 feet high, standing erect. Which is marked (*c*) in the plan.

This great stone, is about 100 feet, or a little more, from the slaughtering stone, (*b*.)

And that such Pillars of Memorial, were usual appendages to these kind of altars, in the earliest ages; and amongst barbarous and idolatrous nations; and were considered as being closely connected with their superstitious rites; appears most plainly, even from the words of the command in the Divine Law to the Israelites; concerning the destruction of all such kind of remains of abomination.

“Ye shall utterly destroy all the places wherein the nations which ye shall possess served their gods, upon the high mountains, and upon the HILLS, and under every green tree. And you shall overthrow THEIR ALTARS, and break THEIR PILLARS, and burn their groves with fire, and you shall hew down the graven images of their gods, and destroy the names of them out of that place.”*

* Deuteronomy, chap. xii. ver. 2, 3.



E. K. del.

G. Richardson, & Son, Sculp.



F 1

Pl VII



F 2



Particular Views of Stone-henge.

J. G. L. del.

J. G. L. sculp.



But though it appears, from these words of the Law, that there then actually were such appendages to the Altars of the Heathen nations, used abominably; yet we may perhaps perceive, that the setting up of such Pillars, near unto Altars, had been a practice, derived, through mistake, and by very gross corruption, from the imitation of such antient Patriarchal usages, in the very first ages, as were perfectly free from every approach to idolatry.

For at Bethel, and near Mizpeh, where there were sacred Altars built, the one by Jacob,* when he fled from Shechem; and the other, as we may conceive, by Samuel,† (since we read that he offered up, in that place, an whole lamb for a burnt-offering), we find that there was, moreover, at each place, a *Pillar* also of Memorial set up, at no great distance from the Altars.‡ That at Bethel, having been set up (as has been before observed), by Jacob, as he was travelling on his journey to Laban: and that at Mizpeh, by Samuel, just after his sacrifice, and the victory the Israelites had obtained over the Philistines.

And at Gilgal, where there were sacrifices offered in the time of Saul, and Samuel;§ it is well known there were standing near adjoining, *the twelve stones*, that had been placed as a *Memorial* of the passage of the Israelites over Jordan.||

It is not at all to be wondered at, therefore, that in subsequent ages, there should be a perverted imitation.

Those holy men set up their Pillars of Memorial, in places, where Almighty God had *actually revealed Himself to them*, by express visions, or manifest tokens of favour: but the Gentiles, without any such authority, set them up, on every high place; from the mere dictates of fancy and superstition.

And it is very curious to find, that in sequestered parts of modern countries, where the remoteness from intercourse with those who are improving in modern usages, and by means of increasing light, prevents a change of antient habits, and customs; the *imitative* regard for such a Stone of Memorial, or of introduction to a sacred spot, is still preserved.

* Genesis, chap. xxxv. ver. 7. 14. † 1 Samuel, chap. vii. ver. 9. ‡ Genesis, chap. xxviii. ver. 11 to 19. 1 Samuel, chap. vii. ver. 12. § 1 Samuel, chap. xiii. ver. 9. chap. xv. ver. 12. § 1. || Joshua, chap. iv. ver. 20, 21, 22, 23, 24.

Thus we are told,* that in the Western Isles, on the coast of Scotland, in the Isle of *Gigay*, near the west side of the modern church, there is a Stone placed, about 16 feet high, and 4 broad. This stands upon an eminence. And about sixty yards distance from the chapel, there is a square Stone erected, about 10 feet high; *at which the antient Inhabitants usually bowed*; because it was there, where they had the first view of the church.

And as to still more remote, and sequestered people, we learn from Beverley,† that the Indians in Virginia often set up, as a sort of hieroglyphics of the Permanency of the Deity, *Stones*, and *Pillars*, which by that means became sad objects of idolatry. And that moreover, they were accustomed to erect *Altars*, wherever they had occasion to record any remarkable event; their principal devotion consisting in sacrifice. And that they have a profound respect for these Altars: and, when they travel *by* any of them, take great care to instruct their children, and young people, as to the particular occasion, and time of their erection; and recommend the respect which they think they ought to have for them. Thus connecting these Altars, and Pillars, with Memorials relating to their history; and making them serve in the room of written history.

To return to the more immediate consideration of Stone Henge.

Besides the detached Stone forming the Altar for slaughter; and the Stone of Memorial, which has occasioned this digression; there stand, on the inward bank, two other lesser Stones, (*d*) and (*e*): and there are also, directly opposite to each other, and placed very nearly north, and south, the appearances of two basons, or hollowed excavations, about 16 feet in diameter, at (*f*) and (*g*), placed on the same bank; or rather hollowed out of it. Which cavities were certainly designed for some precise superstitious use; concerning which it is perhaps, not only difficult, but even not very desirable, to ascertain any thing with certainty.

But most probably they were designed to hold the blood of the victims; or at least as receptacles into which it was to be poured. And it is almost impossible not to bring to mind, on seeing them, the curious description given by Homer, of the rites performed

* Martin's Description of the Western Isles, p. 229.

† History of Virginia, p. 184, 185.

by Ulysses; undoubtedly in compliance with antient superstitious usages, and ideas, with which Homer was acquainted.

The substance of the whole description, extracted from Pope's translation, is this: when Ulysses had approached the place destined for his sacrifice, he says:

*I from the scabbard drew the shining sword ;
And trenching the black earth on every side,
A cavern form'd, a cubit long and wide.
New wine, with honey temper'd milk, we bring,
Then living waters from the crystal spring ;
O'er these was strow'd the consecrated flour,
And on the surface shone the holy store.*

Book xi. line 29.

*Then dy'd the sheep ; a purple torrent flow'd,
And all the cavern smok'd with streaming blood.*

line 45.

*Straight I command the sacrifice to haste,
Straight the flead victims to the flames are cast,
And mutter'd vows, and mystic song apply'd.*

line 57.

Thus much for Pope's translation. But the original explains the matter better, for there, describing the excavation made by the sword of Ulysses; it is not spoken of, as describing *a square cavern, a cubit long and wide*; but

Βόθρον ὄρυζα, ὅσον τε πυγούσιον, ἔνθα καὶ ἔνθα.

I dug a pit, as much as a cubit every way.

That plainly is, *a circular pit*, a cubit in diameter. And mentioning the slaughter of the victims, it is not said, *the cavern smoked with blood*, but

τὰ δὲ μῆλα λαβάν ἀπεδειροτόμησα

Ἐς βόθρον, ἥε δ' αἷμα κελίανεφές.

That is;—Seizing the sheep; I slew them
Over the pit, and the black blood flow'd.

The curious will excuse this digression ; and now, whoever views what is clearly intelligible of this antient structure at Stone Henge ;—the Stone of Memorial ;—the Slaughtering Stone ;—the great pits, or basons for receiving the blood ;—the Altar of hard Grey Marble, in the central part of the whole, for the fire ;—and the *high Altars of Oblation* :—is it possible for him, if he well considers what is related concerning those most remarkable sacrifices offered by Balak, and Balaam, not to discern a most obvious and striking resemblance between this High Place, and the High Places of Moab ?

From the appearance of the ruins, and from the void spaces left, I should judge (as I before mentioned), there were originally *seven* high Altars, or Trilithons, at Stone Henge, as well as in the High Places erected by Balak : and that the stones of two of them, nearest to the entrance, have been destroyed, and carried away ; as has certainly been the case with regard to some others of the great stones of the outward Circle.

But whether there were in this place five, or seven ; the resemblance is equally striking. And one cannot but be surprised, that it should never have been remarked before.

Nor is the resemblance destroyed ; although it should be supposed that the Stone Altars erected by Balak, in so short a space of time, were much less massy, and of inferior bulk to those at Stone Henge. For (besides the consideration of the circumstance, that Balak had his whole army, at command, on the occasion) ; we are not without an instance, as I shall hereafter shew, of a similar structure (or at least of one for similar purposes) of much less dimensions.

It is very likely, that succeeding ages did, as superstition increased, increase the majestic ponderosity of the stones composing these sort of high Altars. A circumstance that is no more to be wondered at, than that the vast piles of Norman cathedrals, should succeed to the small Saxon churches.

That these Altars of Stone Henge, were of the very *latest* ages of Druidism is manifest, from tools having been lifted up upon them, both to form their shape, and to carve the tenons, and mortesses. For the original Druidical Altars, like those of the Patriarchs, and those directed by the Law, we may be assured were to be without any tool. And indeed the lesser *high place*, which appears to have

been of a similar destination with that at Stonehenge, and which shall presently be referred to, was so. Nor shall we perhaps err, if we deem this caution to have been at first used, in order to be an indication, that the creatures of the Almighty God, *the Great Creator*, cannot, by any thing they can of themselves do, really add to, or increase the original perfection which He has designed, and will finally bring to pass, in His due time, by means and instruments best known to Himself, with regard to all His works.

“ *If thou wilt make me an Altar of Stone, thou shalt not build it of hewn stone: for if thou lift up thy tool upon it, thou hast polluted it,*”* are the words of Divine Law.

Whatever idea the Druids may have had, either in earlier ages, or in those when *Stonehenge* was reared; there can scarce remain a doubt, but that the observances used by Balak, and Balaam, in the High Places of Moab; and which had been derived from a corruption of Patriarchal observances, long prior; were also, from the same antient original, copied by other nations; and therefore, however much corrupted, somewhat copied here.

And as it pleased Almighty God, in vindication of His supreme Power, and in support of His original Divine promises to Abraham, to condescend on the occasion alluded to, to cause the Prophet Balaam, by his express command, to deliver, contrary to the expectations of the King of Moab, and contrary to Balaam's own wish, a most Solemn Prophecy, not only concerning the prosperity of Israel, but also concerning the final coming of the Messiah; it may, with a view to fling some little additional light upon that most important subject; as well as to illustrate the history of the remains we are considering, be well worth our while, to endeavour to apprehend more fully, the whole of that curious narration.

It is intelligible enough indeed, from the present elegant translation in our Bible: but it is much more so, from that given in the Septuagint; to which therefore I shall beg leave to have recourse.

It is *there* as follows:

Numbers, chap. 23.

1. *And Balaam said unto Balak, build me here seven HIGH ALTARS, and PREPARE ME HERE seven young bullocks, and seven rams.*

* Exodus, chap. xx. ver. 25.

2. *And Balak did as Balaam had spoken. And Balak, and Balaam PLACED UP ON HIGH, a bullock and a ram on every altar.*

3. *And Balaam said unto Balak, stand thou here by thy OFFERINGS, and I will go and see whether God will manifest Himself to me, to meet me: And whatsoever word He sheweth me, I will tell thee. And Balak stood BY HIS OFFERINGS, and Balaam went to inquire of God; and he went on STRAIGHT FORWARDS.*

4. *And God manifested himself unto Balaam. And Balaam said unto Him, I have prepared the seven HIGH ALTARS; and have lifted UP ON HIGH a bullock and a ram, on every altar.*

5. *And God put a word in the mouth of Balaam, and said, return unto Balak, and thus thou shalt speak.*

6. *And he returned unto him, and behold he stood by his WHOLE BURNT OFFERINGS, and all the Rulers of Moab with him.*

Now whoever well considers this account of Balaam's Patriarchal Offering, will discover several most remarkable particulars in it; illustrative of those remains of still more corrupted Imitations, which we find at Stone Henge.

For, in the first place, the word βωμός,* made use of, to describe

* A quite different word, is uniformly made use of in Scripture, for an Altar on which Sacrifices are burned. For in Genesis, chap. viii. ver. 20. where mention is made of Noah's building an Altar unto the Lord, the word is not, as here, βωμός; but Θυσιαστήριον. So again, when mention is made of Abram's building an Altar, chap. xii. ver. 7. and chap. xxii. ver. 9. So again, when mention is made of Jacob's building an Altar, chap. xxxv. ver. 1. and ver. 3. And so again, when mention is made of Moses's building an Altar after obtaining the victory over Amalek. Exodus, chap. xvii. ver. 15. And where the most solemn directions are given, by Almighty God Himself, concerning the building His Holy Altar, the word is still Θυσιαστήριον; both where an Altar of Earth is mentioned, and where an Altar of Stones is mentioned. Exodus, chap. xx. ver. 24, and 25, and 26. In Exodus, chap. xxi. ver. 14.—chap. xxix. ver. 37. ver. 44.—And where the Altar of Incense also is mentioned, chap. xxx. ver. 27. still the word is Θυσιαστήριον and not βωμός.

Again Leviticus, chap. vi. ver. 9.—Numbers, chap. vii. ver. 84.—chap. xviii. ver. 3; where the Holy Altar of God is mentioned; still the word is Θυσιαστήριον. And in Judges, chap. vi. ver. 25. 31. And 1 Samuel, chap. ii. ver. 33. And in 2 Samuel, chap. xxiv. ver. 18, where David is commanded to build an Altar unto the Lord, the same word is carefully used.

And further; when Elijah is said to have repaired the Altar of the Lord that was thrown down, 1 King's, chap. xviii. ver. 30; the identical same word Θυσιαστήριον is used.

So again, 2 Kings, chap. xviii. ver. 22; and in the Psalms, and Prophets continually; see Psalm, xxvi. ver. 6; Psalm, xliii. ver. 4. Isaiah, chap. xix. ver. 19.—chap. lvi. ver. 7.

the Altars, signifies most clearly, according to the explanation given of it by Eustatius, * a certain structure RAISED HIGH, and having a plain surface, on which any thing may be RAISED UP and placed. And the words, which in our Bible are translated, offered on every Altar a bullock, and a ram, do, in the Septuagint, most properly signify, the lifting of the victims up on high; whilst the words, prepare me here

Lamentations, chap. ii. ver. 7. Ezekiel, chap. viii. v. 16. Joel, chap. i. ver. 13.—chap. ii. ver. 17. Amos, chap. ii. ver. 8. Malachy, chap. i. ver. 7. 10,—chap. ii. ver. 13.

And the same word *Θυσιαστήριον* is in the Holy Gospel confirmed as the proper word for an Altar on which sacrifices were to be burnt, and consumed; see Matthew, chap. v. ver. 23.—chap. xxiii. ver. 18. 35. Luke, chap. xi. ver. 51. 1 Cor. chap. ix. ver. 13.—chap. x. ver. 18. Hebrews, chap. vii. ver. 13.—chap. xiii. ver. 10. Revelations, chap. vi. ver. 9.—chap. viii. ver. 3.—chap. ix. ver. 13.

It appears therefore manifestly, that this word *βωμὸς*, here used in the account given of Balak's Offerings, indicates most clearly a quite different thing from an Altar on which sacrifices were burnt, and consumed by fire, like those on the Holy Altar of God.

It must mean an Altar on which Victims, prepared by the fire, were placed as Oblations. And this is still more strongly confirmed, by the use of the same word in other places, where it is at all mentioned.

For when the Reubenites, and the Gadites, and the half tribe of Manasseh, on their going to dwell in their own country beyond Jordan, built the Altar of Memorial, with which the rest of the Tribes of Israel were so enraged, that they were about to fall upon them, and to destroy them; as conceiving it to be a breach of God's most Holy Law, and a discovery of some disposition towards Idolatry; and therefore an act of Rebellion against the Lord; we find then this same word *βωμὸς* used. Joshua, chap. 22. ver. 10, 11, 16, 19, 27, 34; and in the description given of it, we find it described as being a great Altar to the View. Whilst it is remarkable; that in the very same Chapter, where the Altar of God is mentioned, ver. 19, that is on the contrary called *Θυσιαστήριον*. And, in the vindication of their conduct, ver. 23, the Reubenites, &c. declare that this Great Altar they had built, was not for the purpose of lifting up thereupon, on high, any whole burnt offering, or any other sacrifice; as the Heathens were used to do.—And protest, ver. 29, against its being *Θυσιαστήριον*, an Altar for burning Sacrifices at all, whatever resemblance it might bear to the Altar of the Lord.

So in Isaiah's Prophecy, chap. xvii. ver. 8, where the confidence which the Syrians placed in their false Altars is mentioned; and again in chap. xxvii. ver. 9, where the indignation of the Lord is expressed against the idolatrous Altars: the word *βωμὸς* is used. Although where mention is made of the Altar that should be to the Lord, in the Land of Egypt, the word *Θυσιαστήριον* is used.

And in Exodus, chap. xxxiv. ver. 13; and Deuteronomy, chap. vii. ver. 5, where an express command is given to break down the Altars, and to overturn the Pillars, of the idolatrous people; the words used, are *βωμὸς* and *στήλη*; and are used in such a manner conjointly, as to represent to our minds such structures as this at Stone Henge.

* See H. Stephens's Thesaurus, p. 800.

seven young bullocks, &c. indicates rather the dressing them, and making them ready, than merely *the burning of the victims*. At the same time also, the circumstance of Balak's continuing to stand with, his whole Court, some time, by what is called *his whole burnt offering*; or rather, by *his sacrifice dressed whole and entire*; seems to indicate, that it was *not consumed to ashes*; but that, having been *dressed and prepared whole, by the fire*, each carcass was, in that state, placed on one of the Altars; just as we read, in the Voyages of Cook, that the animals dressed in the South Sea Islands, were placed on their rude *high Altars*.

Not one word indeed is said of the time that was taken up in preparing the Altars. But as Balak had his whole army at hand to assist in that service; it would not require many days; even though they may be conceived to have been formed of stones of considerable bulk. And we may be assured that each of them must have been both large enough, and strong enough, to bear the placing thereon a bullock, and a ram. And so far must have resembled those at Stonehenge.

In the next place; from the circumstance mentioned, of Balak's standing with all the Rulers of Moab, by the Altars; it is most probable, and almost certain, that those Altars must have been placed in nearly a circular form: and that there must have been certain fixed stations for the Rulers with him: in which particulars again the ceremonial seems most exactly to agree, with what must have been the Observance of the Rites, in such an *high place*, as this remarkable one, which we have been considering, on Salisbury Plain. For here was evidently an hearth for the great fire for preparing the sacrifice near the centre;—and the high Altars of Oblation surrounding it, whereon to place the victims when dressed and prepared;—

Again, in the Acts of the Apostles, chap. xvii. ver. 23, when St. Paul mentions the Altar at Athens, with the inscription *to the unknown God*, it is called *βωμὸς*.

To which I cannot but add this one remark, that, when in the latter ages of the refinements of the horrid corruptions of idolatry, carved Altars of a smaller size were used, instead of these great primæval instruments of abomination; all the specimens of them which we have remaining, of the age of the Greeks, or Romans, and which have from time to time been dug up, plainly shew, by their dimensions, and figure, that they were utterly incapable of having any victims burnt upon them; and that all that could be done, was the having Offerings *placed upon them*;—or at most, occasionally, a very small fire.

and a circle of small black pillars, just within that of the Altars, to denote *the stations* of the Chiefs, and great Officers attending; And another circle of small black pillars, just within the outward surrounding portico; probably to mark *the stations* of inferior Officers.

And in the third place, the description of the next set of Altars reared by Balak, still continues the idea of observances of exactly a similar kind; and even with an hint of their connection also, with other customs of the *Moabites*, that may be compared with those of the *Britons*. For we read,

Ver. 13. *And Balak said unto him; come yet with me to another place, from whence thou mayest not see this people, at a single glance: but thou shalt only see some part of them, and shalt not see them all: and curse me them from thence.*

Ver. 14. *And he brought him, to a spying place of the country; to the summit of an hiding place; (or STRONG-HOLD OF RETREAT.) And he built there seven HIGH ALTARS, and LIFTED UP ON HIGH a bullock and a ram on each altar.*

And surely it cannot escape notice, that we have here a very curious account of Balak's carrying Balaam, to just one of those kind of original fortresses, on the summit of a rock, which we have had occasion to describe in the beginning of these Observations.

Afterwards, when the second Prophecy had given as little satisfaction to Balak as the first; and when he had determined to make a third experiment; we have still an account of a repetition of the very same rites as before.

Ver. 27. *And Balak said unto Balaam, come, I will conduct thee to another place; peradventure it will please God that thou mayest curse me them from thence.*

Ver. 28. *And Balak brought Balaam, to the top of Peor, that looketh towards the Wilderness.*

Ver. 29. *And Balaam said unto Balak, build me here seven Altars, and PREPARE FOR ME here seven young bullocks, and seven rams.*

Ver. 30. *And Balak did as Balaam had said, and LIFTED UP ON HIGH a bullock and a ram on each Altar.*

Here, I should perhaps properly close these remarks.—But as it has pleased Almighty God, of His Infinite Wisdom, to call the

attention of mankind to the words even of a *Gentile Prophet*:—and as *those words*, according to the rendering of them in the Septuagint, are still more nervous, and more emphatically descriptive both of the prosperity of Israel, and of the GREATNESS of the future Kingdom of the Messiah, than the translation in our Bible; I cannot forbear just adding, for the fuller satisfaction of the curious, a careful translation from *thence*, of all the four distinct Prophecies, in successive order.—The first begins thus :

The First Prophecy.

Ver. 7. *And taking up his parable he said—Balak the King of Moab hath called me from Mesopotamia, out of the mountains of the East; saying; come defy for me Jacob: and come curse for me Israel.*

Ver. 8. *How shall I defy him, whom The Lord hath not defied? And how shall I curse him, whom God hath not cursed?*

Ver. 9. *For from the summit of the mountains I shall see him: And from the high hills I shall well consider him. Behold a People shall dwell apart: and shall not be reckoned amongst nations.**

Ver. 10. *Who shall be able to count the seed of Jacob? or who shall number the Governments† of Israel. Let my soul in death depart with the souls of the righteous:‡ and let my progeny be like his.*

* That is most plainly; *shall be distinct from, and superior to all other nations.* There is not surely a more astonishing and striking Prophecy than this, in all the Holy Scriptures: for it most manifestly has pointed out; not only the great peculiarity of character of the Jewish nation, that was to subsist even whilst they were to be in possession of their kingdom in the Land of Palestine: but also it has foretold, in what an unparalleled manner they should still subsist as a *distinct people*; even when they should be dispersed, and cease to be a nation: and moreover, what an high degree of supereminence should at last be obtained, by THE TRUE ISRAEL OF GOD, over all nations, in the days of the Messiah's final Kingdom. And ver. 10, seems, in pursuance and confirmation of this idea, to point out, and even to describe clearly, *The very many great, and subordinate dependant Governments*, that should finally be established, under *The true Israel*: when, according to the words of another superior, and subsequent Prophet, *The Kingdoms of this world shall become the Kingdoms of The Lord, and of His Christ.* Revelations, chap. xi. ver. 15.

† This surely denotes clearly the subordinate dependant Governments of a Great Empire.

‡ And at the same time, the solemn, *awful wish*, in the same verse, plainly indicates, that the full completion of the blessing, and of what was foreseen, related not merely to the then temporal prosperity of Israel, on earth; but to the days of future ages.

The Second Prophecy.

Ver. 18. *And taking up his parable he said, arise Balak, and hear; attend to a witness, thou son of Zippor.*

Ver. 19. *God is not as a man; that He should fail to perform. Nor as a son of man; that He should boast in vain. Hath He said? and shall He not do it? or shall He speak? and doth it not remain established?*

Ver. 20. *Behold I have received commandment to bless:—I shall bless: and shall not reverse it.*

Ver. 21. *There shall not be wretchedness in Jacob.* Neither shall distress be seen in Israel. The Lord his God is with him. And the glorious acts of Rulers are amongst them.*

Ver. 22. *It was God who brought him out of Egypt, as a glory of HIS ONLY HORN OF STRENGTH.†*

* Ver. 21. This verse, as it stands in the Septuagint, is A BLESSING INDEED; and most manifestly, both a declaration of the prosperity that should ensue, on the Israelites taking possession of the Promised Land, notwithstanding the contrary wishes of Balak; and still more plainly, a promise of the final blessings that should attend the kingdom of THE MESSIAH: whilst the words, as they are rendered in our translation in the Bible; *He hath not beheld iniquity in Jacob, neither hath he seen perverseness in Israel*; can scarcely be reconciled with what we read of the behaviour of the Israelites in the Wilderness, both in Exodus, and in this Book of Numbers.

† This expression seems plainly to mean the same thing as if it had been said, as *the Glory of the Messiah*.—Because from Israel, the Messiah was to descend, and to be born according to the flesh.

It seems also to be an expression intended to denote the *Supereminent Dominion* of Christ, the Messiah. Just as He is, in other places, called *the ONLY Son of God*, John, chap. iii. ver. 16. 18. And *the ARM of the Lord*, Isaiah, chap. li. ver. 5. 9. Ibid. chap. liii. ver. 1. Ibid. chap. lxii. ver. 8. And His being here prefigured as *The Only Horn of Strength*; is surely exactly similar to, and coinciding with what we read, in many other passages of Divine writ; where it is said; *He shall exalt the Horn of his Anointed*. 1 Samuel, chap. ii. ver. 10. And again, Psalm, cxxxii. ver. 18. *There shall I make the Horn of David to flourish*. Both which are also clearly Prophecies concerning the Messiah. So in Psalm xcii. ver. 10, (or rather 11), the expression in the Septuagint is even still more exactly similar to this; for there we find the Royal Prophet, when speaking of future blessings and comfort, saying, *Mine Horn shall be exalted, as the Only Horn of Strength*. Which surely is both *there*, as well as *here*, a more intelligible translation, than that which we read in our English version; *mine horn shall be exalted like the horn of an unicorn*.

So again, in a manner consonant to these expressions, we read, Psalm lxxv. ver. 5. 6. *I said, to the ungodly, set not up your horn; set not up your horn on high*. And ver. 12. *All the horns of the ungodly will I break; and the horns of THE RIGHTEOUS shall be exalted*. Where it is remarkable, that, in the Greek, *the ungodly* is put in the plural number; but *the righteous* in the singular.

Ver. 23. *For there is no divination against Jacob. Neither is there any prophesying against Israel. IN TIME shall it be said to Jacob, and to Israel; what will God perform!*

Ver. 24. *Behold a people shall rise up as a young lion; and shall rage with fierceness as a great lion. He shall not lie down, until he eat of the prey, and drink the blood of the slain.*

The Third Prophecy.

Chap. xxiv. ver. 3. *And taking up his parable he said, Balaam, the son of Beor, hath said; the man who sees the very truth hath said;*

Ver. 4. *He hath said who heard the words of the Almighty God; who saw a vision of God IN A DREAM,* having the veil withdrawn from his eyes.*

Ver. 5. *How goodly are thy dwellings, O Jacob! and thy tents, O Israel!*

Ver. 6. *As shadowing groves; and as gardens by the rivers side; as tents which God hath firmly fixed; and as cedars by the waters.*

* The original word signifies most properly, *in his sleep*. And I cannot pass it by unnoticed, that this one verse, as it stands in the Septuagint, removes all the difficulty with regard to what is related concerning the *speaking of the ass*. For hence it should seem, that all that is related concerning that wonderful fact, was merely the substance of a divine dream, or vision in the night. And that indeed it was so, appears the more probable; because nothing is said, in the relation itself, concerning the attendants and messengers, who we know travelled with Balaam; and who must, as they were journeying with him, have seen or known something of that astonishing event, had it really happened on the road, and openly in the course of the day.

It must be confessed however, that the translation, as it stands in our version from the Hebrew, conveys rather a different idea; leading us to suppose that Balaam fell into a trance on the road. But even according to that reading;—from the words of the 4th verse, *which saw the vision of the Almighty, falling into a trance, but having his eyes open*; which are repeated again in the 16th verse, we may rest well assured, that whether this vision was in a dream at his own house; or at any resting place on the road; or whether it was an extatic vision, as he was riding, and setting upon the back of his beast; or after he had been crushed against a wall by the beast starting aside in the way; that yet, in any one of these cases, all that passed between Balaam and the ass, as to any words spoken, was *but in a vision*; and we are under no necessity at all of supposing that the beast ever did speak; or once utter any sound like a word.

And to these observations I cannot but add, that the word used by the Seventy, in the latter part of the verse, ἀπεκαλυμμένοι οἱ ὀφθαλμοὶ αὐτῆ, does much rather signify having a veil removed from his eyes, or having an *extatic vision*; than *having his eyes open*, according to the common acceptance of that expression.

Ver. 7. *There shall come forth A MAN from his seed, who shall rule over MANY nations: whose kingdoms shall be exalted higher than Gog; and His dominion shall be increased.*

Ver. 8. *God hath brought Him out of Egypt, as a glory of HIS ONLY HORN OF STRENGTH. He shall eat up nations of his enemies; and be replenished with their fatness; and with his arrows shall pierce through AN ENEMY INDEED.*

Ver. 9. *Couching, He lay down to rest as a great lion;* and as a young lion: who shall rouse him up?—They that bless Thee, are indeed blessed;—but they that curse Thee, are cursed.*

The Fourth Prophecy.

Ver. 15. *And taking up his parable he said, Balaam, the son of Beor hath said, the man who sees the very truth hath said;*

Ver. 16. *He hath said who heard the words of God; who understood the knowledge of the Most High; and who saw a vision of God, IN A DREAM, having the veil removed from his eyes.*

Ver. 17. *I shall behold Him;† though not now. I pronounce Him blessed; though He doth not YET approach nigh. There shall arise a star out of Jacob. Even A MAN shall be raised up out of Israel, and shall break in pieces the rulers of Moab; and as a Shepherd, shall feed all the sons of Seth.*

Ver. 18. *And Edom shall be an inheritance. Even Esau, his Enemy, shall become an inheritance. And (IT SHALL BE SAID) Israel hath done valiantly.*

* As the 7th and 8th verses are a most remarkable prediction of the dominion of the Messiah over all nations; and of His great final victory over Sin, and Satan; so it deserves singular notice, that the emblem of a *Great and Strong Lion*, made use of to prefigure THE MESSIAH, in the 9th verse, is exactly conformable to the type by which He is prefigured, both in Jacob's Prophecy of Him; and in the book of Revelations. In Genesis, chap. xlix. ver. 9, 10, we read in the Septuagint, where the truest sense seems to be given;

Ver. 9. *Judah is a young lion. From the true rising branch my son art thou ascended. Couching he laid down to rest, AS A GREAT LION, and as a young lion, who shall rouse him?*

Ver. 10. *There shall not fail to be a Ruler out of Judah, nor a Leader descending from him, until HE come, for whom the RULE is finally determined. And HE is the expectation of all nations.*

And in the book of Revelations, chap. v. ver. 5, we read—*behold the Lion of the Tribe of Judah, the root of David, hath prevailed to open the book, and to loose the seven seals thereof.*

† The original words signify more fully, and properly; *I shall behold Him, and point to Him, to make Him known to others.*

Ver. 19. *And He shall be raised up out of Jacob; and shall destroy what was saved out of a city.*

Ver. 20. *And beholding Amalek; and taking up his parable he said, Amalek was the first of nations: but his seed shall be destroyed.*

Ver. 21. *And beholding the Kenite; and taking up his parable he said, Strong is thy dwelling place: but though thou puttest thy nest in a rock;*

Ver. 22. *And though Beor be to thee a nest of cunning device, the Assyrians shall carry thee into captivity.*

Ver. 23. *And beholding THE OG,—and taking up his parable, he said, alas, alas, who shall live, when God shall establish SUCH AS THESE BE!*

Ver. 24. *For they shall come from out of the hands (or out of the bands) of the Ketiāioi,* and shall afflict Assur; and shall afflict the Hebrews;† and they themselves shall perish in like manner.*

Ver. 25. *And Balaam rising up, departed, returning to his place. And Balak went away BY HIMSELF to his house.*

The many strong reasons for concluding several of the Druidical Stone Circles to have been designed for astronomical uses, and observations, has been mentioned in the preceding pages. And an

* Who were meant by these people, the *Ketiāioi*, I cannot presume to say; whatever my suspicions be: not being satisfied with any translation whatever that I have met with of *this word*.

† The ensuing prophecy, however, manifestly denounces, the final destruction of the Assyrian empire; and also the destruction, or at least the heavy affliction, of the *Hebrews*.

And therefore the persons described, *as coming out of the hands (or from the bands) of the Ketiāioi*, seem manifestly, in the first instance, to relate to the Romans: who were finally to destroy the remnant of the Assyrian empire, under Antiochus; and were also to lead the *Hebrews*, and Jews, into captivity: but were themselves to perish at last.

And as the original promises, and predictions, concerning the Great Messiah, (THE MAN *who was to arise out of Jacob*) were previous to, and established before all these denunciations, concerning the Hebrews; so it is obvious, that *His Kingdom and Glory* was to *succeed*, in order of time, to all the accomplishments of these Prophecies: and is therefore *now still* to be looked for, as to its final perfect completion: as are also perhaps the final great effects, and final destruction of the power of *the very Og*. Which last word perhaps related, at the time Balaam delivered the Prophecy, only to some then present power; esteemed either as allies to, or part of the fiercest of the bands of the Moabites. But who might very well be an emblematical representation of the destructive Power, that was to prevail, for a time, in the latter days.

ingenious writer, Dr. Smith,* has conceived the number and position of the Stones, at *Stone Henge*, to have had the same designation, in a sort of mystical manner.

Apprehending that the outer circle of thirty stones, multiplied by the number of the twelve stones, which stood within, and which (as he thinks) were intended to mark the twelve signs of the Zodiac, was a mode of representing the antient solar year, of 360 days. And that the inner circle of thirty stones, (one of which seems to have been smaller than the rest), denoted the lunar month of 29 days, 12 hours. Six at the upper end of the circle signifying *the hunters'*, and *the harvest moon*; rising six nights together with little variation: whilst the great ellipse, composed of seven pair of pillars, with an impost on each pair, signified the seven planets, and their influences. Within which, was the circle of twelve stones, for the signs of the Zodiac. The centre of the circle is in $51^{\circ} 11''$ latitude: which he conceives to be peculiarly connected with the position of the stones. And the circular holes, near the margin of the bank, are by him apprehended, at the time of the construction, to have marked out a meridian.

The coincidence of circumstances, is certainly very extraordinary. And some such mystical allusion to astronomical numbers, and divisions of time, may very fairly be allowed to have been possibly introduced, in these superstitious structures; and especially in the latter, and most corrupt ages of pagan idolatry.

But, leaving that matter to be judged of, as every one shall think fit.—After having endeavoured, by a careful examination of the relative situation of the several parts; and by a comparison of them with antient rites, and ceremonies, (the history of which has been preserved by unquestionable records,) to give some adequate idea of the original appearance, and designation of *Stone Henge*; it may now be proper, notwithstanding the constant apparent confusion of the whole group of stones, when seen altogether;—and notwithstanding the great change which is ever made in their appearance, however little the situation of the observer is changed; to give one or two views of the whole assemblage of stones, as nearly as possible.

* See his ingenious Dissertation, printed at Salisbury 1770, 4to. entitled *Choir Gaur, the grand Orrery of the Druids*.

Pl. $\frac{vii}{4}$ therefore represents the general view of the Remain, as it was about the year 1790; and as seen by a spectator, standing a little on the outside, westward, and looking eastward. Where the great Trilothon on the left of *the leaning stone*, near which the figure of an horse is placed, is that which has since fallen down. And *the leaning stone* itself is that which once formed one of the supporters of the greatest, and highest Trilothon standing at the upper end. It is that which was just behind the great black flat stone, for the fire hearth; which lies on the ground, and is shewn in the Plan, Pl. VI. fig. 1, at *y*.

Pl. $\frac{vii}{3}$ shews the same assemblage of stones; seen from the same spot; as it now appears in 1798, since the great Trilothon (marked 3 in the plan) has fallen.

And the great original supporters of that Trilothon, now lying flat on the ground, are distinguished by the figure of a man standing by, in a stooping posture, to examine them.

And in this view also, are plainly seen, in the further part, on the right-hand side, and also near the fallen stone on the left, some of those smaller black upright stones; which have been mentioned, as designed probably to mark *the stations* of certain great Officers, during the celebration of the abominable superstitious rites. There are seen also, quite at the further end, some remains of the outward portico, or Circle of lower covered stones; a part of which were shewn. Pl. VII. fig. 1.

This portico is shewn by the outward regular circle of stones in the Plan, Pl. VI. fig. 2. As the stones supposed to have been placed, for marking the Stations of inferior Officers, are shewn by the next inward Circle: and those for marking the Stations of the great Officers, by those of the small inner Circle of all.*

Pl. $\frac{vii}{4}$ shews the same assemblage, as seen before the year 1790, by a spectator standing a little on the outside, southward, and looking northward. And here, *the leaning stone* is seen on the left: and the smaller stones of *station* are seen more plainly; and also somewhat more of the outward *portico*. But to avoid confusion, some of

* These two drawings I was favoured with by the *Rev. Mr. Rackett*, who had also been assisted by the celebrated *Mr. Beachy*; and to whom the world has been indebted for so many other useful and correct delineations.



View of Stonehenge from the western side of the leaning Stone.

Back of
Foldout
Not Imaged



View of Stonehenge from the western side of the Avenue, Stone after the fall of the western Sarcophagus

Back of
Foldout
Not Imaged



View of Stonehenge in 1790 from the Southern Side of the leaning Stone.

Printed by J. B. G. & Co. No. 10. Pall Mall.

Back of
Foldout
Not Imaged

the stones, lying on the ground, by the leaning stone, and before it, are left out.*

We may now venture to resume the course of our inquiries ; and to proceed with our observations, by remarking plainly, and without further hesitation, that such as were Balaam's Altars, such in some degree were the Altars at Stone Henge ; only more vast, and magnificent ; being constructed by a people who were at the time more at leisure : and who erected the Altars with more additional appendages, for the purposes of more gross Superstitious Rites, introduced in the later, and still more corrupted ages of the world.

And after having adduced so many circumstances, to shew that it was in very truth an antient British Structure ; an old *high Place* ; a *βασις* ;—we may venture to affirm, that the idea of its having been, as some have supposed, merely a monument erected in remembrance of the massacre of the four hundred and sixty British nobles by Hengist ; when he seized and took Vortigern, their king, prisoner, is not deserving of any credit.—Yet I must add, that nothing is more likely, than that the perfidious designs of that ambitious Saxon should have been carried into execution, in so dire a manner, on this very spot. For no place surely was so fit to assemble both Vortigern, and his train of Chieftains, for the purpose of a Solemn Treaty, as that *high place*, where *the Britons* had so often been accustomed to assemble, on their most awful public occasions.†

It was thus, that, in still earlier times, *Ishmael*, with his perfidious train, persuaded *Gedaliah*, the Governor of Judea under Nebuchadnezzar, in the *high place* at *Mizpah*, to treat with him ; and to eat bread ; or feast with him ; when, just like Hengist, on a sign given, he caused his followers to slay *Gedaliah*, and all those Jews and officers who were with him.‡ The facts, and stories, are almost exactly similar : and I can therefore easily believe, that *this* was indeed the very spot whereon that murder by Hengist was

* It ought to be mentioned, on this occasion also, that there are some very curious representations of Stone Henge, as seen in different points of view, in a publication entitled a *Tour through the South of England, Wales, and Ireland, made during the summer of 1791*. And that the late ingenious *Mr. Keate* published one or two Views of parts of the outward Portico.

† There is a curious account of this Massacre in the *Antiquarian Repertory*, Vol. I. p. 146.

‡ *Jeremiah*, chap. xl. ver. 13. 16. chap. xli. ver. 1. 3.

committed ; although it never could have been originally reared in remembrance of that murder, consistently with any degree of historical probability ; and although it existed as a great *high-place*, long before this dreadful event ; as *Mizpah* did, long before the murder of *Gedaliah*, and his officers.

It ought just to be added ; that it has been observed,* that its very British name *Cor Gaur*, points out an *Asiatic* origin ; and leads us to conclude, that it was some kind of resemblance of something derived from the East. As indeed many other Oriental, and Hebrew words, introduced into the British language (as appears from a comparison of them with the Welch language), shew that both names, and rites, were in many instances derived from the Phœnicians, and from the abominations in the Land of Canaan : or perhaps, rather, from that *original root* ; from whence those still more corrupted abominations in the Land of Canaan sprang.

Let us now proceed to the consideration of those other Remains, of a similar kind, that have been discovered, of late years, in the Isle of Jersey ; upon a smaller scale ; and approaching nearer, in bulk, even to the *Whattas*, or superstitious Altars, still in use amongst barbarous nations, in the South Sea Islands. Whilst also, they may be deemed to have approached nearer to the real bulk of the Altars erected by *Balak*.

They are placed round an irregular Circle, about 24 feet in diameter ; or rather 60 feet in circumference.†

Their number at present, is mentioned in the *Archæologia* as being five only ; but this, on a close inspection of the whole, as it has been cautiously preserved, and set up in the garden of General Conway, I found to be a mistake : for the number is evidently seven : the termination of the covered entrance itself having plainly served for one of the Altars ; and there being evidently the remains of one other Altar, on the right-hand side ; of which only the top stone is gone.

The interval between the Altars, is filled up with rude Stone Pillars, of irregular heights ; a Pillar being placed between every

* See a very ingenious Dissertation, by W. Williams, in the *Gentleman's Magazine*, Vol. LXI. p. 108. † See the account, and plan, and views of the whole, in the *Archæologia*, Vol. VIII. p. 384. 386.

two Altars : whilst the whole seem never to have been profaned by the use of any iron tool.*

These Altars are (in the *Archaeologia*), called *Lodges*, or *Cells*: and, by some subsequent observers of this curious Remain, have even been supposed to have been mere *Kistvaens*; or chests, and tombs, for depositing dead bodies. Which latter supposition had some countenance, from the state in which this whole extraordinary structure was first discovered in Jersey: it having been buried under an heap of earth and stones, like a barrow.

But as the small narrow intercolumniations of the *Trilithons*, (or great high Altars), at Stone Henge, shew, that the void spaces under them could never have been *Kistvaens*; so here, the small and narrow dimensions of the cavities, under these Altars, are but ill adapted to such a purpose. Whilst at the same time, it ought to be remarked, that in order to their having ever been appropriated to such-use, under any barrow, the inner circular area must have been vaulted, or covered over; † at least as securely as the passage of entrance can be supposed to have been secured by the covering of large stones. But as, on the one hand, there was no appearance of any vault, or covering of stone, remaining; so, on the other, there is no one appearance in the structure, that should lead us to conclude, that those who erected it, had the least idea how to form an arch, or vaulted roof. And the irregular heights, and forms of the stone pillars, between the Altars, shews clearly that it was impossible any such rude vaulted roof should ever have been constructed.

These Cells therefore, or rather real Altars, could never have had any use at all, except when quite clear of the superincumbent stones and earth, and freely exposed to the open air.

They were obviously covered up at last, on purpose to be concealed; and to be preserved, if possible, as sacred, from such destruction as had been brought upon so many others in Anglesey, the chief Druidical Island, by the Roman Invaders; and out of terror of the dire example of vengeance executed *there*, by Suetonius Paulinus.

* See the Views of them both in the *Archaeologia*, Pl. XXVIII. p. 384; and also in Grose's *Antiquities*, Vol. VI.

† We shall hereafter find, that in real barrows, such covering of the interior part was contrived by rude stones laid one upon another; forming a sort of *hollow cone*.

A Medal of Claudius Cæsar, found in the midst of the earth and stones, under which this Circle of Altars was buried,* seems to evince this to have been the case.

And how far it was most unlikely that these Altars should ever have been designed for Kistvaens, or Sepulchres, appears from their dimensions, even as given in the *Archæologia*; and still more from the dimensions which I took myself, measuring exactly the insides.

Of those which remained perfect, the cavity of the largest, as described in the *Archæologia*, facing nearly the east, measures only 4 feet 3 inches in length; and 4 feet 3 inches in depth, from the front.

The next, on the left, measures 4 feet in breadth; 4 feet 3 inches in length; and 3 feet 7 inches in height.

The third, measures, in breadth, 2 feet 16 inches: in length, 2 feet 19 inches; in height, 4 feet.† And the rest seem to have been in the same sort of proportion.‡

And the entrance to this sacred Circle, is a covered way, (composed of rude upright stones, and of as rude stones lying across them), and was about 15 feet in length; and about 5 feet 3 inches in breadth; and 4 feet 4 inches in height, in the inside; and somewhat smaller at the beginning of it.

According to my measures, (leaving out every where the thickness of the stones themselves), the whole length of the entrance was near 16 feet.

The Altar which terminated it, and under which any person entering is obliged to pass, fronts the highest stone in the circle, and may therefore be called No. 1.

And its dimensions, and the dimensions of all the rest, going round the circle on the inside, in regular order, proceeding from the entrance towards the left, are as follows, by my measures:

| | | | | |
|-------|---|----|-----|---|
| | | F. | In. | |
| No. 1 | - | - | is | $\left\{ \begin{array}{l} 4 \ 8 \text{ wide,} \\ 2 \ 11 \text{ deep,} \\ 4 \ 0 \text{ high;} \end{array} \right.$ |

* *Archæologia*, Vol. VIII. p. 385.

† *Ibid.* p. 384.

‡ The whole are now removed to General Conway's elegant seat, near Henley on Thames.

| | F. | In. | |
|--|----|------|-------|
| No. 2 - - - is | { | 3 4 | wide, |
| | | 2 10 | deep, |
| | | 4 10 | high. |
| No. 3 - - - is | { | 2 4 | wide, |
| | | 3 9 | deep, |
| | | 3 10 | high. |
| No. 4, almost opposite to the entrance, is | { | 3 6 | wide, |
| | | 5 7 | deep, |
| | | 4 0 | high. |
| No. 5 - - - is | { | 2 5 | wide, |
| | | 3 0 | deep, |
| | | 3 0 | high. |
| No. 6, the broken one whose top stone is off, - - - is | { | 2 8 | wide, |
| | | 2 3 | deep, |
| | | 3 7 | high. |
| No. 7 - - - is | { | 3 0 | wide, |
| | | 3 8 | deep, |
| | | 3 5 | high. |

The dimensions of the Circle, measuring first a diameter from one of the side stones at the entrance, to the middle of the highest single stone opposite; and then a diameter quite across, are, as I found them,

| | F. | In. | |
|---|----|-----|------------------------|
| The first diameter - - | 24 | 6 | |
| And the transverse diameter | 24 | 9 | |
| And the first was, as nearly as I could judge, in a direction, - - | { | - | E N E and W S W. |
| And the transverse one - - | | | S S E and N N W. |

So that the entrance must have fronted about E by N. And probably, if we make allowance for the variation of the needle during a long succession of ages, was originally exactly E; as it stood in Jersey. I venture to say this; because great care was taken, by General Conway, to have every stone placed exactly in the same position in which it was originally found in that island.

The account in the *Archaeologia* says, the entrance fronted almost eastward; as the entrance did at Stone Henge. And at some small distance before the entrance, only a little on one side, was found standing a sort of *Stone of Memorial*; represented in the Plan, in the *Archaeologia*, and in Grose's Views.

We have *here*, therefore, surely another, though smaller group, of those Druidical Altars of Oblation; which may justly be compared with those, reared under the direction of the Patriarchal corrupt Prophet *Balaam*.

And the constant tradition of a great Cromlech, and of a Circle of Stones, having also stood formerly on the same hill in Jersey; and of many other Druidical Monuments having been discovered; both here, and in the neighbouring Islands of Guernsey, Alderney, and Sark, (most of which have been pulled down, and used for building) confirms this idea.

The Stones of this small Circle of Altars, found in Jersey, do not bear any such marks of the tool, as those at Stone Henge; and seem to have been preserved in their original situation merely by means of having been covered up. Many others therefore of the more antient ones, in this our Island, may easily be conceived to have been thrown down long ago: and, like the many Druidical antiquities in Guernsey, Sark, and Alderney, to have been used for buildings, and walls.

But nevertheless we are not without instances of *some* fragments, the few remaining parts of which seem clearly to point out, *where* such sort of Circles, of Altars of Oblations, may have been, in other parts of the country, in the times of the antient Britons.

And amongst these, on this occasion, I cannot but particularly mention, that most curious Druidical Circle, in the Peak of Derbyshire, called *Arbelows*, or *Arbour-lows*; about five miles from Bakewell:* which, when fully considered, there is great reason to think, notwithstanding its mutilated appearance, in its present ruined state, was once a regular structure, very nearly of the same kind with that at *Stone Henge*. For we find there, several great stones lying on

* It is most exactly described, and represented, by Mr. Pegge, in the *Archaeologia*, Vol. VII. p. 131.—who assigns many strong reasons for concluding it to be a British Temple.

the ground, *in pairs*, and much broken; some of which were lately remembered by old persons in the neighbourhood, to have stood upright. It may therefore fairly be concluded, that the greater part of them stood upright also; and *in pairs*;* two and two, nearly in the spots where they now are found. And if they stood in a Circle; and in such a peculiar position; there seems good reason to apprehend, that each pair had a transom stone, or impost, at the top, somewhat like those at Stone Henge; which impost was composed, either of the fragments now lying on the ground, near the pairs of Stones; or of fragments more broken, and carried away.

Besides this resemblance; near the middle of the Circle, which is 58 yards in diameter, is found lying flat (just as at Stone Henge), a great Stone, *fit for a fire hearth*, 13 feet long, and 7 feet wide;+ and near to this another, which seems to have formed part of a Cromlech.

We have therefore *here*, the apparent remains of a great Stone, for the fire, and burning; and of a Circle of Altars of Oblation; nearly as at Stone Henge. To which, if we add, that there appear to have been Pillars on each side the entrance; and that the whole Circle is surrounded with a great Rampart, or Bank, 6 or 7 yards high, measuring by the slope; having a fosse *within*, and not on the outside, which fosse, is 5 yards over, in the bottom; the resemblance which *Arbelows* bears to *Stone Henge* cannot escape notice.

And this resemblance becomes still more striking; when we consider, that those two tumuli, called *the Lows*, have each of them a circular hollow cavity, like a bason, on the top;‡ that may be somewhat compared with the remarkable basons on the banks of the Inclosure of Stone Henge: and that one of these *Lows*, with its bason, stands near adjoining to the Rampart, or Bank, of this Circle, the *Arbelows*; and that the other is on the bank itself.

One can scarce forbear entertaining a suspicion, in like manner, that a Circle of Stones, which has before been mentioned, not far from *Castell Dinas* (a strong British fortress), in *Wales*, was somewhat of this kind. For there we find a great Circle of Stones, about

* *Archaeologia*, Vol. VII. p. 142.

+ *Ibid.* p. 142, 143.

‡ *Ibid.* p. 141.

56 feet in diameter ; formed of piles of loose stones, *with upright Columns*, placed *in pairs*, at 5 yards distance from each other.*

And it ought not to be omitted ; that, at about 30 yards distance from this, is another lesser Circle of Stones, consisting of several large upright stones, amongst others that are smaller.

An attentive observer, with more opportunities than have been in my power, may perhaps soon discover *more instances* ; wherein Stone Pillars, *standing, equally high, in pairs* ; and in parts of the periphery of a Circle, or Oval, are to be met with.

And perhaps, amongst others, may be named one not far from Penrith, in Cumberland, at a place called *Addingham*, or *Ald-Hengham*, where is a Circle of Stones, 300 feet in diameter, having sixty-seven of the stones now standing, each 10 feet high : † of which, in Camden's time, there were seventy-seven. For here, as at Stone Henge, there is found, on the outside, at the distance of about 70 or 100 feet, a vast upright *Stone of Memorial* ; 12 or 15 feet in height ; near 2 yards square at bottom : and having, as a peculiarity, *a remarkable hollow* at the top. And a little way from it, nearer to the Circle, were, within the remembrance of several persons still living, four large Stones, forming a sort of *Altar*, or *Cromlech*.

This Circle is by the vulgar called Long Meg, and her Daughters ; ‡ and by Camden is too hastily concluded to be the Monument of some victory. But its whole appearance, and the adjoining *Altar*, and *Stone of Memorial*, shew it to have been a British Circle. A fact that is confirmed also by the British name of the town near adjoining, *Penrith* ; and by its having still further the appendage of another lesser Circle, at a small distance, 50 feet in diameter ; consisting of twenty stones.

On this occasion too, though it does not exactly relate to the present purpose, it would be some omission, not to mention that most remarkable Remain in Westmoreland, at a little distance from Penrith, called *Mayborough* ; situated on the summit of a small hill, because it shews still further the connection of the first-mentioned Circle of Stones, with British Antiquities.

* Pennant's Journey to Snowdon, p. 110.

† Gough's Camden, Vol. III. p. 174. 190.

‡ A view of this Circle is given

in the Antiquarian Repertory, Vol. I. p. 239.

For it is a vast circular bank ; the height and breadth of which is stupendous ; surrounding an area 88 yards in diameter, and having an entrance on the east side.* Near the middle is an upright stone, 9 feet 8 inches high, and 17 feet in circumference. And there had been three more placed near it, so as to form a square ; besides four more on the sides of the entrance, one at each exterior, and one at each interior corner. All which last, have of late years, been blasted by gunpowder, to clear the ground.

And this curious place, seems, in truth, to have been a British Druidical Court, for the administration of justice ; and for other Civil purposes, such as Inaugurations : somewhat similar to that in Anglesey, called *Bryn-gwyn*, at *Tre'r Dryw*, that is mentioned by Rowland.† And it has, like that, a round Cirque, or Theatre also, near adjoining ; formed, in this instance, by an high dike of earth, and a deep fosse within, surrounding an area 29 yards in diameter.

These extraordinary British Remains, therefore, so near Penrith, confirm the fact, that the Circle at Addingham is also British.

And indeed ; notwithstanding Mr. Pennant's apprehension concerning a *great Alley, or Avenue of Stones*, a few miles distance from Penrith, near *Shap*, being a *Danish work* ; I must venture to form the same conclusion with regard to it. For its near resemblance to the great Avenues long since taken notice of by Dr. Stukeley, at Abury, in Wiltshire ; and its proximity to these other unquestionably British Remains, can scarce leave a doubt as to the fact : at the same time that certain large Circles, and Ovals, formed of smaller stones, and placed near unto *that Avenue*, do further speak, in effect, the same language.

The Avenue itself, was formed ‡ of a double row of granites of immense size, that once extended above a mile. And it was crossed at the end by another row, all placed at some distance from each other. But a great part of them have been destroyed, within the remembrance of persons still living.

On the top of one of the Stones in the Addingham Circle, we

* See a curious account of it, and a good representation, by Mr. Pennant ; *Tour in Scotland*, Vol. I. p. 256.

† *Mona Antiqua*, p. 89.

‡ Pennant's *Tour in Scotland*, Vol. I. p. 258.

have found was a remarkable hollow, like a rock bason. It probably was for some such purpose as the basons, on the bank, at Stone Henge: for holding of blood, or libations.

Nor are we without other instances, where such substitutes appear.—In the shire of Meris, or Merns, in Scotland, about five miles from Aberdeen,* we find two Circles of Stones.—The one consisting of two concentric Circles; the exterior, above 24 paces in diameter, having thirteen great stones, 9 feet high, standing; and two fallen down: and the interior, 3 paces within the former, having the stones only 3 feet high; like small *Stones of Station*. Whilst towards the east, at 26 paces distance from this Circle, is a great sort of sacrificing *Stone, placed flat on the ground*, (as at Stone Henge); in which there is also a *rock bason*, partly natural, partly artificial, that will hold a Scotch gallon of water.

The other Circle, is rather larger; and at the distance of a bow shot, nearly, from the first: and consists of three concentric Circles; the Stones of the outermost being about 9 feet high; and those of each of the others, like stones to denote *Stations*, only 3. And here again, *on the top of one of the stones, on the east side of the largest Circle, is formed a bason*, or hollowness, 3 inches deep; in the bottom of which is cut a sort of little trough, crossed by another, that is carried down by the side of the stone some way. One other stone also, in the Circle, is observed to have a cavity, or *rock bason* upon it.

Again, in the largest of the Orkney Islands, at a place called Stennis, a most remarkable spot; at the south end of a rude causey of loose stones, forming a sort of bridge over the narrowest part of a lock, is a great Circle, set about with high smooth stones, or flags, about 20 feet high above ground; † 6 feet broad, and each a foot or two thick. And betwixt that circle, and the causey are two other stones, standing much in the same manner as the outward stones at Stone Henge; one of which hath a round hole, or cavity in it. And at the other end of the causey, about half a mile from it, is another great Circle; 110 paces in diameter, with such stones as the former placed round it; and having, moreover, on the outside, towards the east and west,

* See a very curious account of these Circles, by Dr. Garden, in the *Archæologia*, Vol. I. p. 314.

† Wallace's *Description of the Orkney Isles*, p. 52.

two artificial green mounts, just in the same manner, as at Stone Henge, we find two small cones, with cavities like basons at the top, placed on the bank of the outward ditch.

And we ought not to omit giving full weight to what has been well remarked by *Wallace*, in his description of these Circles; that *Boethius*, in his Life of Mainus, King of Scots, expressly says, that *these kind of Circles*, were, by the people of the country, called the Antient Temples of the Gods.

Perhaps even *the Roll-rich*, or Rowldrich Stones,* in Oxfordshire, may be named as having some affinity with Stone Henge; as they certainly had also with *Astronomical Circles*.

For they are placed in a ring, not circular, but rather elliptical; the longer diameter from north to south being 35 yards; and the shorter 33. The stones are of very unequal dimensions both in height, and thickness; few of those now remaining exceeding 4 feet, and some reaching scarce 2: but they seem *designedly* to have been placed at very unequal distances, which gave occasion to Mr. Gale, and others, to think there were many gaps. Almost precisely in the meridian, is one, on the north part, higher than the rest; being 7 feet high, and 5½ broad. And there seem to have been two such others placed opposite to it. At the distance of about 84 yards, also, on the outside of the Circle, towards the north-east, is an huge *Stone of Memorial*, at least 8 feet high, and 7 broad. And about 300 paces eastward from the Circle, instead of an Altar Stone lying on the ground, was a Cromlech, or standing Altar, formed of six stones, (five for supports, and one on the top), mentioned by Dr. Stukeley,† and called by him (though I think very improperly) a *Kistvaen*, but now destroyed.

There are some circular *dish-like cavities*, or *basons*, also, near adjoining, as at Stone Henge: and in the neighbourhood are many barrows; which confirm the British origin of the whole.

Perhaps the Circular Stones that formerly stood in the parish of Addington, near Town Malling, in Kent, which are now almost obliterated, partly by being buried under the sand, and partly by being broken, and removed, ought further to be named, as having

* See views of them in Gough's Camden, Vol. I. p. 285. 294; and Pl. XV. fig. 2. and 3.

† Aubrey Mon. Brit. Stukeley, Abury, p. 10. 14.

some affinity with those at *Stone Henge*. A curious account, has been given of them by Mr. Colebrooke:* from whence it appears, that they in reality formed an oval, 50 paces from east to west; and 42 paces from north to south: that some of them were 7 feet high, and some less. That at the east end, there lay on the ground, a *great Altar Stone*, placed somewhat like that at *Stone Henge*; 9 feet long, and 7 feet broad. Not far from which was seen *another great Stone*, 15 feet long; which there is reason to think once stood upright; and which I should therefore call the *Pillar of Memorial*.

What others there may be still remaining, in such a state as to deserve any particular examination, I shall leave to the investigation of those who may have opportunities of exploring the unfrequented parts of this country. But it would surely be a great omission, to conclude this short enumeration of the most distinguished Remains of this kind, without giving some account of that most superb specimen of British Druidical magnificence, at *Abiri*, or *Abury*, in Wiltshire, which once existed, though it is now quite mutilated; and indeed almost entirely destroyed: the Stones having been broken in pieces, from time to time, by means of fire, and sledge hammers, to build the village of Abury itself; and many of them having also been broken and buried, merely in order to turn the surface of the land into pasture.

In the beginning of this century, however, many persons were living, who remembered the whole of them remaining nearly entire. As we find, also, they had been very little disturbed in Holland's† time. It was not till the year 1713, that the great central Pillar of one of the double separate Circles in the great Inclosure, more than 20 feet high, was demolished; and even after that, one pair of those double Circles, was left almost in its original state till 1720; and enough of the other to ascertain what it once had been. And in Dr. Stukeley's time, when the destruction of the whole, for the purposes of building, was going on so rapidly, still forty-four of the Stones of the great outward Circle were left; and many of the Pillars of the great avenue: and a great Cromlech was in being; the upper stone of which he himself saw broken, and carried away;

* *Archaeologia*, Vol. II. p. 107.

† *Holland's Camden*, p. 255; and *Gough's edition*, p. 112.

the fragments of it alone making no less than twenty good cart loads.

This structure, at *Abury*, must have been of vastness, and of original importance, even beyond those of *Carnbre-hill* in Cornwall; or those in the Isle of Anglesey, mentioned by Rowland. For it appeared, on a cautious examination of it, in the beginning of this century, that it must have consisted of no fewer than six hundred and fifty vast stones.

The idea that may be formed of the whole, from the several accounts that have been transmitted to us,* free from all conjectures of Dr. Stukeley's, or of any one else, is precisely this.

That it was seated on the most elevated part of a great plain, from whence is a very gradual descent every way.

That the main body consisted of one vast Circle, of an hundred enormous stones; each from 15 to 17 feet in height, and near as much in breadth: the intercolumniation between them being in general about 27 feet. And the whole Circle being at least about 1300 feet in diameter; surrounded with a great ditch, near 80 feet broad, and very deep, which had again, on its *exterior* part, a most lofty vallum, at least 60 feet broad, inclosing both the ditch, and an area, that contains about twenty-two acres, and is not less than 1400 feet in diameter. Whilst in the intermediate space, between the Ditch, and the great Circle of one hundred Stones, there was a fine circular walk, of about 50 feet in breadth.

Within the area, inclosed by the great Circle of one hundred stones, were two other distinct *double Circles*, placed in a line running north and south; as it were side by side; only removed at a little distance, the one from the other, and also from the Stones forming the great exterior Circle surrounding the whole area wherein they stood.

Each of these separate double Circles, consisted of two concentric Circles, one within another; whereof the outermost, in each pair, was nearly 466 feet in diameter, and consisted of thirty stones, whose dimensions, and intercolumniations, very nearly resembled those of the great inclosing Circle of one hundred stones. And the

* *Abury*, p. 43, 44, 47, 48. Gough's *Camden*, Vol. I. p. 111.

inner concentric circles, of each of these separate double circles, was about 186 feet in diameter ; and consisted of twelve stones, of the same sort of proportions, and intervals.

In the centre of the first pair of those concentric Circles which stood southward, in the great circular area, was a *great Stone Pillar, circular at the base*, and above 20 feet in height.

And in the centre of the other pair of those two concentric Circles, which were placed northward, in the great circular area, was a vast Cromlech, (or as some have chosen to call it, on account of the appearance of the Cavity underneath, a *Nich, or Kebla, or Cove*), which appeared to have been originally no less than 16 or 17 feet in height, and 35 feet in breadth. And before this, flat on the ground, lay a great *Hearth Stone*, for fire, as at *Stone Henge*, towards the east, or rather towards the north-east.

From the great external circular area, inclosing, with its hundred pillars, these two distinct lesser circular structures, there were two great avenues, formed by rude *Stone Pillars* placed on each side, somewhat like that great alley, or avenue, which has been already mentioned, as not being far from *Penrith* in *Cumberland*.

One of these avenues, more than a mile in length, consisted of an hundred stones on each side, and led, in a south-east direction, to an hill *near Overton*, on which was another double circle of stones, placed *nearer together*. The outermost circle, about 120 feet in diameter, consisting of forty stones, about 5 feet high ; and the innermost, which was concentric with it, of eighteen, larger than those of the outermost. And the diameter of this latter was about 45 feet.

The other avenue, from the great circular area first described, extended westward, in like manner, for more than a mile, towards *Beckhampton*, and did also consist of one hundred stones on each side. And half way, that is, at the fiftieth stone on the north side of this avenue, was another great *Cromlech* resembling that before described. And at the termination of this avenue, was *one single stone* ; and then a vast number of *barrows* dispersed all over the plain.

Having thus endeavoured to convey as clear an idea as possible, from the accounts delivered down to us, I do not wish to add any

conjectures* concerning this extraordinary structure: but cannot forbear just observing, that the great Stone Pillar, in the centre of the southernmost double circle, seems to intimate, that the area there inclosed, was designed for the holding of great Councils, and for Inaugurations; whilst the Cromlech, and great Altar, in the centre of the northern double circle, indicates *that* inclosure to have been designed for sacrifices. And the great circle of an hundred Stones, and the vast ditch, and rampart, surrounding the whole vast area, in which both these solemn places stood, indicates a boundary of that awful regard that was paid to them. The double Circle, on Overton hill, to which one of the great avenues led, having the stone pillars much nearer to each other, induces one to think they might have had transom stones at top originally; and that, therefore, here were the Altars of Oblation. And the great Cromlech of the other avenue, seems to have been similar to some that will be examined, and considered, in the next part of our investigation; and will be remembered on that occasion.

In the mean while, a few more remarks ought to be added, with regard to the history of these kind of structures in general.

For as, upon a full consideration of all circumstances, there appears to have been a very remarkable similarity between the Remains at *Stone Henge*, and what we read concerning the *High-Places*, where Balaam and Balak offered up *their* Sacrifices; so indeed there is the utmost reason to conclude, that all these *Stone Circles*, were originally imitations of those primæval *High-Places*, of which we find so frequent mention made in the books of Holy Scripture: and a comparison of them, with those descriptions, may tend to fling considerable light upon many expressions in the Sacred Writings, that have been much misunderstood.

The common idea, which the prejudices of education, and of vulgar apprehension, have taught us to form, with regard to what

* It may perhaps greatly tend to confirm the truth of these Observations, to call to remembrance the appearance of the remains of the Stone Circles, at *Botalak*; and of those called the *Hurlers*, at *St. Clare*, in Cornwall; as represented in Borlase's *Antiquities*, Pl. XVI. p. 199; and Pl. XVII. fig. vi. p. 206;—only pursuing a train of ideas a little different from those of that curious, and valuable author. For in both those instances, we find different Stone Circles connected together in one group, as well as at *Abury*.

are called *High-Places*, in the Writings of Moses, and the Prophets, is, that they were the Summits of Hills: but though our *Stone Henge* is indeed on the summit of a wide extended hill country; and the Moabitish Altars, erected by Balak, were on very elevated spots; and so probably were many others; yet it manifestly appears, from certain passages in Scripture, that the word which we translate *High-Place*, rather referred to the height, and elevation, and design, of the structure itself, than to the height of its situation: and was generally made use of merely to denote, with peculiar emphasis, its being a *θουός*, or Altar of Oblation: whilst on account of each kind of *High-Place* being, in reality, applied to such an horrible superstitious use, in the worship of false gods, both the name, and thing itself became, in every instance, where it is mentioned in Scripture, so justly an object of sacred abhorrence.

That this name does not imply necessarily a place, or structure, *on the top of an hill*, is manifest from the cautious distinction preserved, in the enumeration of the idolatrous compliances of Ahaz, King of Judah; * where it is said, *he sacrificed and burnt incense in the high places, and on the hills, and under every green tree.*

And also, † *that in every several city of Judah he made HIGH PLACES to burn incense unto other gods, and provoked to anger The Lord God of his Fathers.*

And from the manner in which the Prophet Ezekiel ‡ reproaches the Jews, for building *high places* in streets; and threatens that the enemy shall *break them down*; it is not only obvious that such *high places* were not properly hills, or structures on the summits of hills; but also that they were composed of rude stone, or artificial materials; which might be broken in pieces by violence.

This also appears from several other passages of Scripture, even where any of them are spoken of as being in reality situated on hills, or eminences.

Thus the same Prophet says, § *Ye Mountains of Israel, hear the word of the Lord God,—thus saith the LORD GOD TO THE MOUNTAINS and to the HILLS, to the RIVERS and to the VALLEYS, behold, I, even I will bring a sword upon you, and I will destroy your HIGH PLACES.*

* 2 Kings, chap. xvi. ver. 4.

† 2 Chronicles, chap. xxviii. ver. 25.

‡ Ezekiel, chap. xvi. ver. 31. 39.

§ Ezekiel, chap. vi. ver. 3.

Where we may observe *high places* are mentioned, as being on the sides of rivers, and in valleys, as well as on mountains, and hills.

Again, it is very remarkable, that in the law,* where the *high places*, according to our translation, are threatened to be destroyed; the version of the Septuagint uses the word $\Sigma\eta\lambda\iota\varsigma$ to describe them; as threatening the destruction of their *Pillars*.

The command also, in the book of Numbers† shews, that *High Places* were *artificial fabrics*, that might be pulled down, or overturned.

Ye shall, quite pluck down all their high places.

In reciting which command, the version of the Septuagint again uses the word $\Sigma\eta\lambda\iota\varsigma$, *Pillars*; thereby implying, that *rude Stone Pillars*, were at least a very considerable appendage to, and an important part of the assemblage of objects in these places of superstition.

And it is very remarkable, that in the account given of the abominations of Jeroboam, we even read, *that he made an house of high places.*‡ Indicating, perhaps, that a number of them were capable of being contained within one vast inclosure; (as in the instance of Abury, in this country): though here it must be confessed, the Septuagint differs from our translation, by saying only, “that he made *dwellings at the high places.*”

Further; we read, concerning the *high places*, that they were not removed, or taken away, by Asa,§ or by Jehoshaphat,|| or by Jehoash; ** “for the people OFFERED, and BURNT INCENSE yet in (or on) the high places.”

Which both implies that they were, in reality, removeable; and shews that they were used as *Altars of Oblation*. †† And we find that, by the good King Hezekiah, they were at last actually removed and taken away.

* Leviticus, chap. xxvi. ver. 30.

† Numbers, chap. xxxiii. ver. 52.

‡ 1 Kings, chap. xii. ver. 31, 32.

§ Ibid. chap. xv. ver. 14.

|| Ibid. chap. xxii. ver. 45.

** 2 Kings, chap. xii. ver. 5.

†† This is confirmed by 2 Kings, chap. xiv. ver. 4. chap. xv. ver. 4. 35; and by chap. xviii. ver. 4. 22; and by 2 Chronicles, chap. xi. ver. 15. chap. xiv. ver. 3. chap. xv. ver. 17. chap. xvii. ver. 6. chap. xx. ver. 35. chap. xxi. ver. 11. chap. xxviii. ver. 4. 25. chap. xxxi. ver. 1. chap. xxxiv. ver. 3.

Further we read, that, by Manasseh,* *the high places*, which Hezekiah, his father, had destroyed, were again *built up*.

And again we read, that by that faithful Prince, *Josiah*, (who had even been foretold by name, by the word of Divine Prophecy) *the high places*, where the Priests had burnt incense, were defiled; † and that he brake down *the high places*; and took away (or removed) *the houses of the high places*.

And the words, in another mention of *High Places*, in the conclusion of the history of the ten tribes, are still more explicit: for there it is expressly said, that “*the children of Israel BUILT them HIGH PLACES IN ALL THEIR CITIES. ‡ And there they burnt incense, in all the high places, as did the Heathen, whom the Lord carried away before them.*”

And in words, to the same purport, the Septuagint has the translation, as well as our version.

And indeed that their being Structures of this sort is the true idea of *High Places*, appears not only from this concluding part of the history of the Israelites, as far as relates to the ten tribes; but also from what is said in the very beginning of the history of the Kings of Judah, before the building of the Temple.

For there we read, § “*that the people sacrificed in HIGH PLACES, because there was no House built unto the name of the Lord, until those days.*”

“*And Solomon loved the Lord, walking in the statutes of David, his father: only he sacrificed, and burnt incense in high places.*”

“*And the King went to Gibeon to sacrifice there; for that was the GREAT HIGH PLACE: a thousand burnt offerings did Solomon offer upon that Altar.*”

And we cannot but observe, that although, indeed, in the Septuagint, only the words *ὑψηλοῖς*,—*ὑψηλοστάτη*, and *δοσιασθήριον*, are used; yet that the altar of sacrifice, at Gibeon, must have been a prodigious large one; to admit of the offering up such a number of burnt offerings, according to any of the Observances appointed by the Law.

When Solomon afterwards offered up his magnificent burnt offer-

* 2 Kings, chap. xxi. ver. 3.

‡ Ibid. chap. xvii. ver. 9. 11.

† Ibid. chap. xxiii. ver. 8. 19.

§ 1 Kings, chap. iii. ver. 2, 3, 4.

ings, on the dedication of the Temple, we find it expressly said,* that the Altar there was not sufficiently large on that occasion.

“The King did hallow the middle of the Court that was before the house of the Lord: for there he offered burnt offerings, and meat offerings, and the fat of the peace offerings: because the brazen Altar that was before the Lord, was too little to receive the burnt offerings, and meat offerings, and the fat of the peace offerings.”

Having from these many instances, of the manner, in which the *High Places* of the most antient times of corrupt superstition, are mentioned in Scripture, found reason to conclude that they were clearly somewhat similar to those rude imitations of primæval corruptions, whereof we have so many Remains still existing, in the fragments of the aboriginal Structures of this Island: it may be, in the next place, considered as a matter not undeserving our attention, that we have proofs of similar usages, derived from the same Patriarchal origin, being mentioned in the most antient parts of Grecian fable, and history.

For we read in Homer's *Odyssey*, that when Telemachus approached the coast of *Pyle*, he found old *Nestor*, and his *Pylians*, performing sacred Rites, on the sea shore: and that there were nine ἑστῆσαι, † which word may surely much better be translated nine *Bases*, or *Seats*, or *Tables of honour*; or in other words, nine *High Altars*; than by any other expression we can make use of.

Pope's translation, in this instance, as in so many other places, is merely a sort of paraphrase, conveying but very imperfectly any thing like the real meaning.

“Now on the coast of *Pyle* the vessel falls,
 “Before old *Neleus*' venerable walls.
 “There, suppliant to the Monarch of the flood,
 “At nine green Theatres the *Pylians* stood;
 “Each held five hundred, (a deputed train),
 “At each, nine oxen on the sand lay slain.
 “They taste the entrails, and the Altars load
 “With smocking thighs, an offering to the god.”

* 1 Kings, chap. viii. ver. 64.

† *Odyssey*, lib. iii. ver. 7.

And truly, as there is not the least authority, in the original words of Homer, for the word *green*; so indeed neither the word *Consessus*, *Assembly*, or *Company*, which our Latin translation uses, nor the expression, *nine green Theatres*, which Pope uses, do at all agree with what *ἕδραι* seems intended to imply, or with what is said in the following verses; the plain import of which seems to be; that there were *nine Stations*, with *high Altars*, or *Seats*, or *Tables of honour*; at every one of which stations a party of five hundred deputed Pyliaus were assembled; and at every one of which nine oxen were slain; the thigh parts of them being offered up, upon the altars; according to their idolatrous rites and usages.

And that this is the true import, seems further confirmed by verse 31.

Ἴξον δ' ἐς Πυλίων ἀνθρώπων ἄγῃν τε καὶ ἕδρας,

where it is said Telemachus and Mentor,

came to THE ASSEMBLY, and ἕδρας of the Pyliaus;

for if, in this verse, ἕδρας meant either *Consessus*, *Assembly*, or *green Theatres*, the word would then be a mere repetition. But supposing it to mean *High Bases*, or *Altars*, all is plain, for the words then are,

They came to the Assembly, and High Altars of the Pyliaus.

And we find, also, that here, *close by the Altars*, sat Nestor, and his Sons; and here also they were actually *dressing* those other parts of the slain beasts, that were to be feasted upon by the guests.*

Consistently with this whole explanation, we find in another part of the *Odyssey*, King Alcinous, with his Phæaciens, going down to the sea shore, in like manner, to offer his sacrifices.

And we read expressly, of his *standing*, with his people, *by the high Altar*, (βωμόν) like Balak †

Δῆμον φαίμων ἡγήτορες, ἧδὲ μέδοντες,

Ἐξίστοτες περὶ βωμόν.

And Pope renders the lines not amiss, as to the idea to be conveyed;

The gather'd Tribes before the Altars stand,

And Chiefs and Rulers, a majestic band.

Odyssey, book xiii. line 216.

* *Odyssey*, book iii. ver. 33, to 40.

† *Ibid.* book xiii. ver. 187.

All these instances of the corruptions, and superstitious practices of early ages, though it is painful to enumerate them, yet cast light upon the aboriginal Remains of antiquity in our own country; which were unquestionably appendages to blind superstitious observances, derived by the first colonizers of this Island, from those primæval ancestors of mankind, from whom they were more immediately descended.

And one good use, at least, may be made of these informations: which is; that now, in these *latter days*, when the great light afforded to mankind, has rendered the *Pillars*, and *Altars* of the superstitious and idolatrous ages so incapable of conveying any longer any corrupt superstitious ideas, that the throwing of them utterly down could hardly more effectually abolish every thing abominable relating to them, than has been done;—that *now*, we may be led, by the comparison between these days, and those days, to be rightly and truly sensible of the advantages we enjoy. And when we consider the vast improvements of the arts, and of the conveniences of life, which have attended our emerging from the dreadful chains and fetters of those corrupt times; that we may become sincerely and heartily thankful, to the only true and Almighty God, Immortal, Eternal, Invisible; who (as an Apostle has expressed it) *hath delivered us from darkness, and brought us to His marvellous light*; in His own appointed way; through That Great Deliverer, who was foretold by Balaam, in those remarkable words of Prophecy; when, standing by his seven high Altars of Oblation, following his corrupt Observances, he was compelled, even against his will, to utter the most awful and Divine Truths.

CHAPTER V.

CONCERNING CROMLECHES.

WE come now to the investigation of a part of the Remains of British Antiquity, so horrible, that I should wish to pass over the consideration of all that relates thereunto, with as much rapidity as is possible; and would not even enter into the inquiry at all; but that it would leave the idea of *British Architecture* very imperfect;—and facts unexplained, which will appear, from a variety of circumstances, and unquestionable evidence, to have been hitherto much misunderstood.

There are, in various parts of this Island, Structures of vast ponderosity; and of more art and contrivance than has been usually apprehended; which have defied the ravages of ages; and still retain their pristine form; whilst Castles, Temples, and Magnificent Mansions, the long laboured works of the since intervening successive periods, have slowly arisen, and have more slowly fallen into such utter ruin, as to leave no traces behind them.

Amongst these *Stern Structures*, is *one*, which has stood out all the buffettings of time, and still remains the same.

Which yet, notwithstanding this, so long continuance under the eyes of mankind, has, from age to age, been so superficially viewed; and so erroneously described; though so frequently mentioned in the records of different periods; that of all the accounts now existing in print, there is hardly one, which, on a careful examination of the Structure itself, will stand the test; or be found adequate to convey the true and fair idea of its real form; proportions; and original designation: whilst it is indeed the most completely proper to elucidate the whole history of these kind of Remains, of any thing we have of the sort existing in this Island.

The edifice I mean, is that rude Structure in Kent, called *Kit's Cotty House*, which, therefore, after having explained the several

particular circumstances relating to it (observed on a most accurate survey), I shall make use of, to throw light upon the present subject: comparing it with other similar Structures; and with such fragments of antient history; and of the remains of primæval observances, and corruptions, in various parts of the world; as may, when brought into one point of view, concur to lead us to a right apprehension of the truth.

Nothing has been more detrimental to the progress of real science, than the too humble, and implicit, attention paid to the fancied conclusions of those, who, on the first revival of letters in these parts, began to form *hasty*, though ingenious, conclusions, concerning matters of this kind.

It was easy to fancy, that this structure was erected in memory of *Catigern*, and of the fatal battle fought between his brother Vortimer, and the Saxons, under Hengist, near Aylesford: because it certainly is in a part of the country, which could not be very remote from that very scene of action.

And this plausible fancy, once adopted; though without the least authority, either from positive tradition, or record; or from any circumstance belonging to the Structure itself, that should *truly* concur with such an assertion; has been implicitly followed; and almost without controversy delivered down, from one author to another; without once examining fully, and fairly, the edifice itself, or the peculiar scenery of the country around it; and without ever duly considering either its appendage, of *an Altar on the ground*; or the testimony, and light, that real history might afford, to clear up, what might be known concerning this interesting Remain. And indeed without rendering any tolerable account, why the body of *Catigern* should be conveyed from the field of battle, to this spot, rather than to any other.

First, let us hear; what the very best, though indeed erroneous, accounts of this strange piece of antiquity describe. And then let us see; on the whole, what is its real figure; and artificial construction. And what the records of antiquity, and similar appearances, may teach us concerning its real use.

Camden says,* *Catigern was buried in great state, AS IT IS THOUGHT,*

* Gibson's Camden, p. 194.

near Ailesford, where those four vast stones are pitched on end, with others lying crossways upon them; much of the same form with that British Monument called Stone Henge.

For which strange and mistaken account his recent Commentator* makes the handsomest apology possible;—yet without giving any clear idea of the real form of the Structure;—whilst his old Editor, *Holland*, in the edition of 1610, adding indeed, in part, an account of his own, instead of a close translation, gave a better and fuller description, though not the right one:—it being very deficient, from the circumstance, of representing the top stone as placed, like those at Stone Henge flat, and horizontally; instead of rightly explaining its inclined position. His words are worth inserting, however, both because of their nearer approach to accuracy; and because they shew, still more fully than those of Camden, how little credit is to be given to any apprehension of this structure being *Catigern's* Tomb, or *Kistvaen*.

“*Catigern*,+ honoured with a stately, and solemne funeral, IS THOUGHT “to have been enterred neere unto Ailesford, where, under the side of a hill, I saw four huge, rude, hard stones erected, two for the sides, one transversall in the midst between them, and the hugest of all, piled and laied over them in manner of the British Monument which is called Stone Heng, but not so artificially with mortis and tenants.”

Stow's account is deficient, exactly in the same manner, and for the same cause.

“I have myself (says he),‡ in company with divers worshipful and learned gentlemen, beheld it in 1590, and is of four flat stones, one of them standing upright, in the middle of two other, inclosing the edge sides of the first, and the fourth laid flat aloft the other three, and is of such height that men may stand on either side the middle stone, in time of storm or tempest, safe from wind and rain, being defended with the breadth of the stones, as having one at their backs, one on either side, and the fourth over their heads: and about one coit's cast from this Monument, lieth another great stone, much part thereof in the ground, as fallen down when the same had been affixed.”

* Gough's Camden, Vol. I. p. 231.

† Holland's Camden, p. 332.

‡ Chronicle, p. 52.

Mr. Colebrooke, in his very curious Dissertation* in the Archaeologia, falls into the same mistake; and besides this, as well as Camden and Stowe, entirely neglects to advert to the side stones being not *parallel*; on which the great durability of the Structure manifestly depends.

Philipot† gives a description; and a representation, engraved in the style of Hollar; yet both so totally unlike the truth, that it would be improper to mention either, except for the sake of shewing the more clearly, how strangely the Antiquities of this country have been misrepresented, for want of due attention.

And what is still more extraordinary, even our last painful Antiquary, Mr. Grose, has fallen into a mistake almost more inexcusable than all the rest. For he tells us,

“ This Monument is composed of four large Stones, of that sort called Kentish Rag: three of them are set *upright* in the ground, *inclosing three sides of a square*, and fronting the north, west, and south points; the fourth, which is the largest, is laid transversely over, and serves as a covering, but does not touch the south stone. It is not parallel to the horizon, but inclines towards the west, in an angle of about nine degrees; owing to the west, *or end stone*, on which it rests, being somewhat shorter than the other supporter. Perhaps the east end, now open, was once also inclosed; as at seventy yards to the northwest, lies another stone of the same kind and form, as those standing.”

And further on, describing the dimensions of the stones, he says,

“ The west, *or end stone*, is extremely irregular.”‡

Thus representing the whole throughout, as if the stones were placed, two on the sides, and one *quite at the end*; with a cover at top, *forming merely one regular Cell*, or small room. Which is very far from being the case. His description also is very inadvertent: for the *Altar Stone*, lying towards the north-west, is not very likely to have been a stone closing the now open supposed front, which is towards the south-east; nor would the dimensions have suited either front, as a means of closing it up.

Harris, in his History of Kent,§ gives a representation a very

* Archaeologia, Vol. II. p. 107.

† Villare Cantianum, p. 48.

‡ Grose's Antiquities, Vol. II.

§ History of Kent, p. 371.

little better than Philipots; and under just the same sort of misapprehensions.

And Mr. Hasted, at the same time that he gives us an engraved Representation from a drawing, which is in many respects one of the best that we have; yet neglects to mention the inclination, and sloping of the top stone. And although he fairly, and rightly describes the *third* supporting stone, as being placed in the *middle*, yet suffers the engraving, for want of a very little attention to *keeping*, to appear as if this third stone was placed at the further end of a sort of Cell, or Chamber;* containing the whole of the space under the superincumbent stone.

He also falls into a strange mistake with regard to the position of the *front* of the Structure, both inconsistent with its real position (even allowing that to be the front which has been generally conceived to be such), and also inconsistent with his own description of the Stone lying on the ground. I cannot but say also, that the outlines of the supporting stone, on the right hand, are exceedingly erroneous.

Borlase, in his representation of it; willing to believe, consistently with prejudices he had adopted, that it was a mere Kistvaen, or tomb, or place of burial, does, like Grose, make it appear as if the three supporting stones stood, two on each side, and one at the further end, so as to form a chest, or at least a covering of an area fit for sepulture: taking his information, not from actual inspection, but from a drawing made by another person.†

Yet his own plain account of such Structures of a similar kind as he had seen, might have been sufficient, one would have thought, to have led him to a more accurate investigation of this matter. For he says fairly, in the very same page,

“ I find the number of supporters, in all the Monuments of this kind which I have seen, to be no more than *three*, the reason of which I take to be this; they found it much easier to place and fix securely any incumbent weight on three supporters, than on four, or more; because, in the latter case, also the supporters must be exactly level on the top, and the lower surface also of the

* Hasted's Kent, Vol. II. p. 178.

† Antiquities of Cornwall, Pl. XXII. p. 224.

“ covering stone be planed and true, in order to bring the weight
 “ to bear equally on every supporter ; whereas three supporters
 “ have no occasion for such nicety ; the incumbent weight easily
 “ inclining itself, and resting on any three props (though not of
 “ one level on the top) ; and accordingly, we find the covering
 “ Stones, not horizontal, *but always more or less shelving.*”

This account, with the consideration of the real advantage of three stones as supporters, rather than any greater number, might have led him to have attended more carefully to the *manner* in which they might *best be placed for strength* ; if he had not been prejudiced by his idea of a *sort of Tomb*, or *Kistvaen*, being inclosed and formed by them. An idea which Mr. Pegge,* has very fully shewn to have been adopted without any kind of sufficient authority ; at the same time that he has, also, in his very curious Memoir, said more than enough to convince any reasonable person, that *Kit's Cotty House* could neither have been the Monument of Catigern, or of Horsa ; nor of any person whatever.

It is now time to endeavour to investigate its real history ; only first observing, that the author of the *Louthiana*,† as well as Dr. Borlase, has remarked, in like manner, that the *Cromleches*, in *Ireland*, have in general only *three* supporters ; though indeed so far from being aware of the *firmness* arising from this circumstance, he considers them as being the most tottering of all Structures : which a little reflection on their vast antiquity, and long duration, might have convinced him they were not.

Pl. VIII. fig. 6. is a Plan of the whole Structure of *Kit's Cotty House*, with the respective dimensions of the several parts : from whence it appears manifest, on the very first glance, that there is *no regular Cell*, or *Kistvaen*, formed by these three stones at all ; but that the third stone (*c*) is placed nearly in the midst, between the two others (*a*) and (*b*), as being the properest situation to support them, and to prevent their falling together ; whilst their being placed leaning against it, and inclining towards each other, renders it almost impossible for them to be thrown down outwards, or so as to part from each other.

* *Archæologia*, Vol. IV. p. 115.

† *Louthiana*, Book iii. p. 12.

This peculiar position of the middle stone, leaves indeed somewhat of the appearance of two little Cells, or Cabins, on either side; but neither of them are deep enough for to place therein the body of a man at length; for the one is only 4 feet 2 inches from the front; and the other only $2\frac{1}{2}$ feet; and the supposition of a stone having been placed to close up the mouth of either Cell, would render the dimensions smaller, and still more confined.

But there is another circumstance, which much rather deserves attention, as being a very artificial designation in the Structure. And that is, that the two side stones (*a*) and (*b*) are placed so, as to draw nearer towards each other at the south-east end, than at the north-west; in consequence of which it becomes impossible to throw down the middle stone towards the *south-east*: whilst another circumstance in the Structure, namely, the dipping of the top stone towards the *north-west*, renders it impossible to throw down the middle stone *that way*.

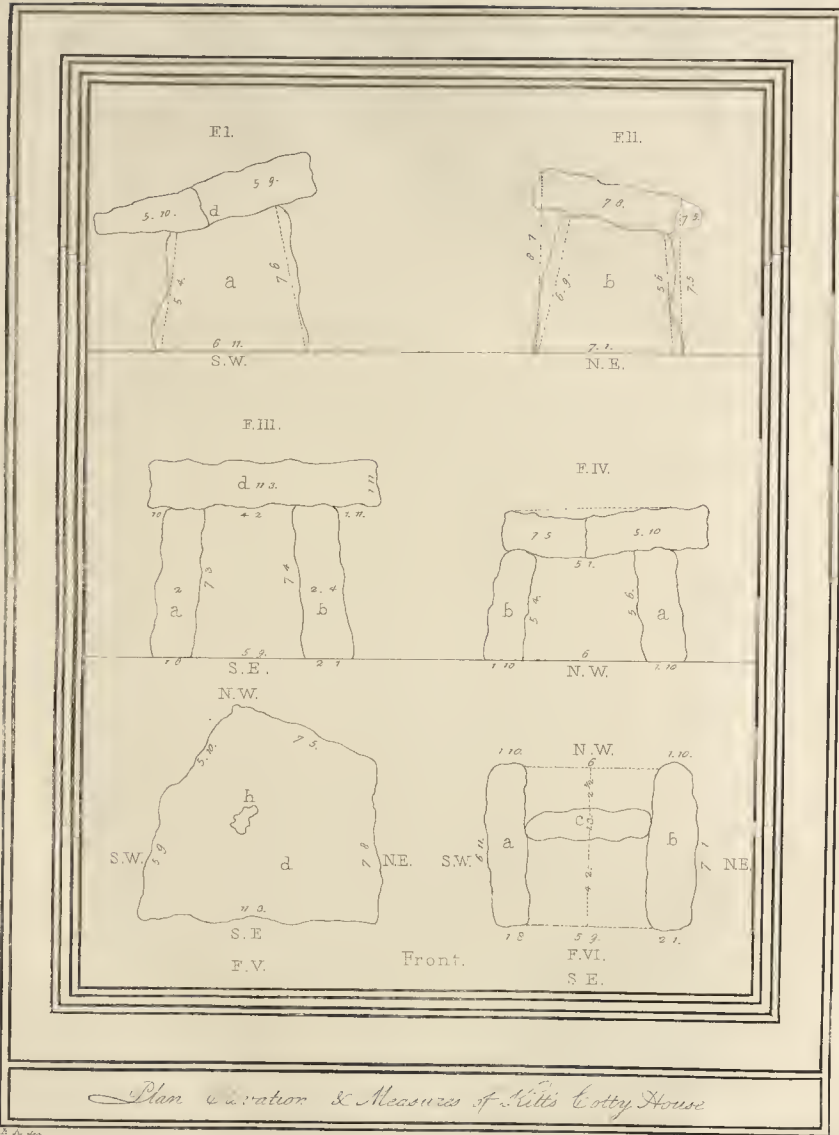
Fig. 1. represents the elevation of the Stone (*a*), with the superincumbent Stone (*d*) projecting over it, both ways, and dipping towards the north-west; and, at the same time shews the rough irregular corner, or point, at (*d*), projecting further than the rest. It shews also the measured dimensions of every part.

Fig. 2. represents the other supporting Stone (*b*), on the opposite side, seen on the external part (as also was the stone (*a*) just described). And here it cannot but demand the attention of every curious person, to observe how exceedingly different the proportions are of these stones, on which no tools *were lifted up*; but which nevertheless were so cautiously, and firmly put together.

It also deserves observation, how strangely irregular the top stone (*d*) is; and how different its appearance, and dimensions are, on this side from the other.

Fig. 3. represents what is commonly called *the front*: but what I apprehend was really the *back part* of this surprising Structure. It shews the dimensions of all the Stones (*a*) (*b*) and (*d*); and the odd, irregular manner in which the top stone projects, on each side.

Fig. 4. represents what is usually taken to be the *back part* of the edifice; but which I cannot avoid conceiving to have been *its front*, from circumstances that will hereafter be mentioned; and also





because, before this face of the edifice, towards the north-west, has been placed a great *Altar Stone*, on the ground, as at Stone Henge. Whilst the direction of the Structure, *if we consider this as the front*, is also nearly similar to the direction of that which is the front of the part destined to superstitious and solemn rites, at Stone Henge.

Fig. 5. shews the form, and dimensions, and relative situations of the several sides, as to the points of the compass, of the top stone. Only it must be remembered, that it dips from the south-east towards the north-west.

Now, put all these circumstances together ; and we shall perceive the astonishing solidity of this Structure : which fully accounts for its having defied the ravages of time ; and for its having remained entire, through such a vast period of successive ages, that all positive records and traditions concerning it being lost, it has become liable to misrepresentation from those hasty conjectures formed, when men first awakened, from the long deep sleep of ignorance and insensibility, to open their eyes, with some degree of curiosity, in researches after Remains of Antiquity.

What efforts, of any ordinary kind, could destroy it?—The top stone could not be thrown down, or taken off ; except by the same means whereby it was raised. Which was, probably, by means of a bank, or hill of earth, formed round about the supporting stones, with a gentle ascent, quite to the top of them : up which, the Stone was forced along slowly, with rollers, and levers, by prodigious united exertions of many men ; and possibly with the aid of oxen to draw it ; when, being advanced to the spot, the whole hill, or mound, was removed, and taken away.

The middle stone (*c*) could not, nor cannot, be thrown down one way, because the dipping of the top stone prevents its vibration, or being turned on its edge into that direction.

Neither can it be thrown down the other way ; because the side stones *nip in beyond it*, and approach nearer to each other towards the south-east, and by that means hold it up fast, and tight, that way.

The side stones (*a*) and (*b*) cannot be separated, and thrown down outwards ; because being placed leaning *towards* each other, as appears most plainly in fig. 4. instead of being placed upright, as some of the old descriptions mention, their vast ponderosity, alone

would prevent their being easily heaved over. Whilst besides this, they could not be so heaved over, without raising up the whole weight of the immense superincumbent Stone.

Thus, therefore, this edifice has stood, and may yet stand, firm, throughout many generations, as several others of a similar kind have stood, in different parts of the world.—The objects of wonder *now*; because most happily, the motive for their being erected, and the detestable use to which they were originally destined, have both long since ceased to have any prevalence on the face of the earth.

The records of most antient history, however, and similar Remains in other parts of the world, together with a little degree of attention bestowed on some extraordinary customs, preserved by other barbarous people, long separated from those primæval Heathen nations, from whom both they, and the most antient Britons, were descended, may perhaps fling more than sufficient light upon this matter.

It will only be proper just to mention, before we enter upon this discussion, that Pl. IX. fig. 1. represents the present appearance of the Structure under consideration, with a distant view of a part of the magnificent surrounding theatre of hills. The front here shewn, being that towards the south-east, usually deemed the front; but which ought rather to be considered as the back part; and the place of the great Stone, or Altar for burning, on the ground, being therefore hidden beyond the building.

In the account, given by Diodorus, of the customs, and horrible superstitions of the antient Druids, in Gaul, who derived both their Science, and Superstition, merely from those in Britain, we read this strange description.*

“ Amongst the Druids, are Prophets (or Diviners), who are held
“ by them in the highest estimation. These men divine concern-
“ ing future events, both by means of augury, and by means of
“ sacrificing victims; and have the whole multitude subservient to
“ them.

“ And in a more particular manner, when they inquire concern-
“ ing any *great event*, they observe a most astonishing and incre-
“ dible Rite. For pouring out a libation upon a man, as a victim,

* Diodorus Siculus, lib. v. 213. p. 354. ed. Wesselingii.

“ they smite him with a sword upon the breast, in the part near
 “ the diaphragm ; and on his falling who has been thus smitten ;
 “ both from the manner of his falling, and from the convulsions of
 “ his limbs, and still more from the manner of the flowing of his
 “ blood, they presage what will come to pass ; firmly trusting in
 “ these conclusions, from an antient, and long established, Obser-
 “ vance.”

And Strabo relates this matter also ; in a manner, indeed, a little different ; but upon the whole to the same purport. For he says, * speaking of their savage custom of keeping by them the heads of their enemies.

“ The Romans have brought them off from these customs, and
 “ also from those which they had adhered to, with regard to sacri-
 “ ficing and divination. For smiting a man (who had previously
 “ had a libation poured upon him) with a sword upon the back,
 “ they divined from his convulsions.

“ They never sacrificed without the Druids.

“ And other sacrifices of men by them, are spoken of. For some
 “ they shoot with arrows ; and some they crucify ; *in the sacred*
 “ *places.*

“ And (also) having formed a vast Colossus of straw, and casting
 “ wood upon this, they make an whole burnt sacrifice, of cattle,
 “ and of all manner of wild beasts, and of men.”

Cæsar says, † speaking of the Gauls, and of their Druids ; *after* having told us ‡ *that the Rites and Discipline of the Druids were found originally in Britain, and from thence carried over into Gaul.*

“ That those who were afflicted with any severe disease, or who
 “ were entered into battle, or were in danger, either sacrificed men
 “ as victims, or vowed that they would so sacrifice them : and they
 “ made use of *the Druids as ministers, or performers of those sacrifices.*
 “ Thinking that the immortal gods could not be rendered propi-
 “ tious, unless *the life of man*, was given for the life of man.

“ They have also *public sacrifices instituted* of the same kind.

“ And others, have images of a vast magnitude, the limbs and
 “ parts of which are formed of wicker work, and are filled with

* Strabo, lib. iv. 198. p. 505.

† De Bello Gallico, lib. vi. sect. 15.

‡ Ibid. sect. 12.

“ living men ; and being set on fire, the men are burnt to death by
 “ the surrounding flame. On these occasions they deem the punish-
 “ ment of such persons as are found to have been guilty of theft, or
 “ robbery, or of any other atrocious mischief, to be most grateful to
 “ the immortal gods : but when there are not enough of these, they
 “ proceed to inflict the same punishment on the innocent.”

Now, laying aside the consideration, of the Colossus of Straw, and Wicker work, and of the poor wretched victims destroyed in it ; (with which, on this occasion, we have no immediate concern ; but the description of which it would not have been right to have separated from the rest of these curious descriptions) ; and putting the other parts of these accounts fairly together, we shall perceive, that in the Observance of these horrid Rites and Ceremonies of the Gauls, derived from the Britains, there was,—*a sacred public spot for the horrid solemnity, fully ascertained and distinguished ;—that it was performed in the presence of multitudes ;—that therefore the poor victim must have been placed ALOFT, in a situation where he could be seen ;—that none but a Druid, or Druids, were ON THE SAME SPOT, to strike the fatal blow ;—that it must also have been such a kind of surface, and elevation, that the flowing of the blood might be traced ; as well as that the sad convulsions of the sufferer might be exposed to view ;—and that the dire ceremony was performed, by first pouring a libation on the head of the poor sufferer, and then striking him with a sword, either on the breast, or back.*

And considering that it is almost impossible to conceive there should be *no* Remains left of any spots destined for such dreadfully notorious solemnities, so much more remarkable above all others : when so many other *marked spots* still exist, that were used for superstitious Rites, even of much less, and of the most trifling importance ; we may venture to affirm, there is no kind of appearance that so perfectly corresponds with these dire relations, which we have from Cæsar, Diodorus, and Strabo, as that of the *inclined Cromlech* in general, wherever found ; and particularly as this Structure which we have been now examining, called *Kit's Cotty House*.

For here we find, in truth, a great Stone Scaffold, raised just high enough for such an horrid exhibition, and no higher : and just large enough, in all its proportions, for the purpose, and not too large :

and so contrived, as to render the whole visible to the greatest multitude of people ; whilst it was so framed and put together, though superstitiously constructed only of unhewn stones, in imitation of purer, and more primæval usages, that no length of time, nor any common efforts of violence, could destroy it, or throw it down.

That front, which seems to have been placed with most superstitious care, in a direction somewhat resembling the front of others of their sacred places, and Stone Circles, and therefore made to face the north-west, has the top stone only about 6 or 7 feet from the ground, at most. Whilst the other end, is elevated between 8 or 9 feet from the ground : and by this means, the whole surface is placed in such a position, as to have exhibited fully, whatever was at any time placed upon it, to an immense multitude of people, even at the greatest imaginable distance. And yet, the declivity is not such as to occasion the least danger of any slipping, or sliding off.

The dimensions of this top stone also were very sufficient for the sad purpose ; since it is about 11 feet, or more, in every direction ; and had, therefore, space enough for the standing of one or two Druids ; and for the victim, both before and after the fatal blow ; from which the sloping of the stone upwards, would probably prevent his retreat, as well as the fetters that might be upon his legs.

And more especially will the surface of the stone appear to have been large enough for the dire purpose, if we consider, that the same horrid precautions might most probably have been in use here, which we find to have been observed by those savage tribes of Indians, in America, descended from the same common heathen ancestors ; amongst whom the dreadful custom of sacrificing their prisoners remained still in use, within a very few years, if it is not still existing.

We find that in Mexico, on such occasions, the prisoners' feet were sometimes tied to a stone. And, amongst the Brasilians, the poor victim had a rope wound around his waist, the two ends of which were held tight, by two of the executioners, one standing on each side, whilst a third struck the fatal blow.*

There is further to be observed, on the surface of this great Upper

* See Picart's Religious Ceremonies, Vol. III, p. 137. Pl. LXXX. De Bry's History of Brasil, Pars iii. p. 125.

Stone of this Cromlech, a cavity, or *Rock bason*, probably designed to receive part of the blood, as it flowed down. This bason is of an irregular form, about 2 feet in length, and 11 inches, or one foot, in breadth; and extends in such a manner *under* the surface of the stone, that it will hold several quarts. It has almost always a quantity of rain water in it at present; and there are, besides this, many rude channels on the surface of the stone, which might be used to catch the flowing blood, whether they were originally formed by nature, or by art.

The situation of this bason, on the top of the stone, and the figure of the whole platform is shewn, Pl. VIII. fig. 5.

And in Pl. IX. fig. 1, is a View of the back front of this Structure, or huge Stone Scaffold, towards the south-east; which has, I think, most erroneously, usually been deemed its real front. I preferred, however, the giving this representation; both because it is the appearance most commonly attended to; and also, and still the rather, because it shews the *rising* of the hills in the front, and on the side of this Cromlech, from which hills, many thousands, and even myriads of people, might distinctly see all that passed upon the surface of the top stone.

Just beyond this Cromlech, and concealed by it, in this View, at the distance of about 70 paces, or the cast of a *coil*, lays on the ground, the great Stone, which was, as I apprehend, the *Altar for burning*; which stone is mentioned by Stowe, Colebrooke, and Grose.

It is about 11 feet in length, by 7 broad; just fit for such a purpose; but much too large to have been used to close up either end of the Cromlech. And as to any idea of its having once stood upright, I can perceive no more grounds for such a supposition, than for any conjecture that the black Stone Altar, at Stone Henge, was ever reared in a perpendicular position: which no one has ever imagined.

It cannot but have been remarked, by an attentive inquirer, that a *Cromlech*, with an *Altar Stone*, for burning, lying before it on the ground, existed at *Abury*; in the centre of one of the great double Circles. And that there was also a detached Cromlech (of which Dr. Stukeley saw the final destruction), standing near the end of one of the great avenues. Which latter was probably for the accom-

F.1.

Pl. IX



F.2.



*View of Kilt's Cottage House, in front of
an Altar Stone, in Sully.*



plishing of those more private vows of this horrid kind, mentioned by *Cæsar*; whilst the former, in the midst of one of the Circles of Stones, within the great inclosure, was for the more public dreadful solemnities of this kind.

And it cannot but be remembered also, that there was a great Cromlech, existing a few years ago, as an appendage to the sacred Circle of superstition, at Roll-rich in Oxfordshire; though of late years it has been utterly destroyed.

Let us now consider, what traces of primæval Customs, and Superstitions, are to be met with, corroborating these ideas; either amongst those most barbarous Indian nations, who have long been separated, at a distance, from those corrupt branches of the first inhabitants of this *present* globe of the earth, from whom they originally sprang: or amongst those more civilized nations of antiquity who remained nearer to the Patriarchal Residence.

As to the first; we find that the Mexicans, who most probably were descended from the Phœnicians, and Carthaginians, retained their horrible rites of human sacrifices; and performed them in a manner that may very obviously be mentioned, as a sad, and obvious, illustration of the present subject.

For, we are told,* that in the centre of the great area, of one of the largest Temples at Mexico, which would contain eight or ten thousand persons, is a great Stone Platform, or Stage, 120 steps high, and 40 feet square, but diminishing, in dimensions, upwards, till it formed a sort of truncated pyramid. And on this were placed some of their abominable idols; and the poor victims to be sacrificed, having been first carried to the foot of another artificial terrace formed of timber, on which hung upon poles, reaching from post to post, the skulls of such unhappy persons as had been before sacrificed; they were then carried up the great terrace; which seems plainly to have been merely an abominable and dreadful refinement upon the more antient *Cromlech*; when six of the priests slaughtered each victim in turn, in a shocking manner, tearing out their hearts, and then throwing the bodies down from the top of the terrace to the bottom.

* See Antonio de Solis's History of the Conquest of Mexico, Vol. I. p. 223. And Picart's Religious Ceremonies, Vol. III. p. 127.

On some particular occasions, the captive had his feet tied to a stone, and was allowed, as long as he could, to parry the instrument with which one of the priests struck at him.

And in other instances, the miserable captive was placed with his back on a sharp stone, about 5 feet high, and being there held, was ripped up by the dreadful tormentor.

Here surely we discover the very counterpart of the descriptions given by Strabo, of the Gaulish and British human sacrifices, even very lately existing, in horrid Rites practised by Indians, who had long lost all remembrance of their origin, but who were most probably descended, through Tyrians and Sidonians, (where such abominations, we are assured, had existed originally in their utmost extent of horror), from the same first heathen ancestors with the Celtes, and Britons.

The Mexican great Altar of Sacrifice, was a truncated Pyramid: and even in this country there seem to have been some constructed somewhat in the form of a truncated pyramid; of which there is a most remarkable instance mentioned by Rowland,* in a small one standing on the summit of an hillock, at Bodowyr in Anglesey; the upper stone of which, he says, is a detruncated pyramid, flat at top. Though it ought to be acknowledged, that the flat space, left at the top, in this instance, was too small for such dire use as we have been mentioning; unless more than ordinary precautions were used.

And if Ware's representation is to be depended upon, † such an one seems to have been placed at *Brenan's Town*, six or seven miles south of Dublin.

As we find such traces of the *Cromlech*, in the instance of the great Altar at Mexico, amongst those who may be believed to have been descendants of Phœnicians; so it is very remarkable, that the resemblance of it may be found existing, in the very country of the Phœnicians themselves; only with just so much introduction of the use of the iron tool, to add somewhat of ornament, as was consistent with the original plan of construction on the one hand; and with the ideas of magnificence, which the Tyrians and Sidonians had acquired, in the very first ages, on the other.

* *Mona Antiqua*, p. 92; and Pl. V. fig. 2.

† See Ware's *Antiquities of Ireland*, p. 140. Pl. I. fig. 1.

This resemblance of the *Cromlech*, is on the Syrian coast ;—and is the very instance I alluded to, of traces of these customs existing amongst the more civilized nations of antiquity.—And its existence carries the more weight with it ; because the curious Traveller, who first gave us the full account of it, had manifestly no right idea of its real design and use himself, to occasion any bias in his description ; although his words are *such*, that when we have once become at all acquainted with these kind of Structures, it is impossible not to be struck instantly with the strong resemblance.

I shall therefore, the rather give the account in his own words.*

Describing the situation of the antient *Arphad* of Scripture ; the *Aradus* of the Greeks and Romans ; our most intelligent traveller, Maundrell, says, adding at the same time, that its inhabitants were *famous for navigation*, (and therefore, we may conclude, might very probably be the very ancestors of the Mexicans), that, “ the first
“ Antiquity that we here observed, was a *large Dike*, 30 yards over
“ at top, cut into the firm rock. Its sides went sloping down, with
“ stairs formed out of the natural rock, descending gradually from
“ the top to the bottom. This Dike stretched in a direct line, east
“ and west, more than a furlong, bearing still the same figure of
“ stairs, running in right lines all along its sides. It broke off at last
“ at a flat marshy ground, extending about two furlongs betwixt it
“ and the sea. It is hard to imagine that the water ever flowed up
“ thus high ; and harder (without supposing that) to resolve, for
“ what reason all this pains of cutting the rock in such a fashion,
“ was taken.

“ This Dike was on the north side of the *Serpent Fountain* ; and
“ just on the other side of it, (that is plainly on the south side of
“ the *Serpent Fountain*), we espied another *Antiquity*, which took
“ up our next observation.

“ There was a Court of 55 yards (165 feet) square, cut in the
“ natural rock ; the sides of the rock standing round it, about 3 yards
“ high, supplying the place of walls. On three sides it was thus
“ encompassed ; but, to the northward, it lay open. In the centre
“ of this area, was a square part of the rock left standing ; being 3

* Maundrell's Travels, p. 20.

“ yards high, and $5\frac{1}{2}$ yards (or $16\frac{1}{2}$ feet) square.—This served for a pedestal to a *Throne* erected upon it.

“ THE THRONE was composed of four large Stones, two at the sides, one at the back, another hanging over all the top, IN THE MANNER OF A CANOPY. The whole Structure was about 20 feet high, fronting towards that side where the Court was open.

“ The Stone that made the canopy was $5\frac{1}{2}$ yards square, (*i. e.* above 17 feet, or 17 feet 3 inches). And was carved round with an hand—some cornish.

“ What all this might be designed for, we could not imagine; unless, perhaps, the Court may pass for an idol Temple, and the pile in the middle for the throne of the idol: which seems the more probable, in regard that *Hercules*, the great abomination of the Phoenicians, was wont to be adored in an open temple.

“ At the two innermost angles of the Court, and likewise on the open side, were left Pillars of the natural rock; three at each of the former, and two at the latter.”

Now, here we may plainly observe, in the first instance, that the idea of a *Throne* having been intended to be formed by the great stones, and that which overhangs in the manner of a canopy; has no more authority, nor any better support for it, than the idea of the stones at Kit's Cotty House having been put together, in the manner they are, merely to form a *Nich*, or *Cell*; or a *Kebla*, or *Kistwaen*; which the whole of the Structure shews to have been almost an impossible design; and which idea has not the least countenance from any records of antient history, or from any well applied similarity of antient usages whatever.

And we may also observe, at the same time, that the words of the description, that *the whole was composed of four large stones, two at the sides, one at the back, and another HANGING OVER ALL at the top,**

* All Maundrell's descriptions, the more they have been examined by subsequent travellers, are found to be minutely exact, and good; but the drawings, and engravings, designed to illustrate his account (for want of having had skill in drawing himself, or any able draughtsman to attend him), are known to be as bad. I have ventured, therefore, following closely the words of his own description, to endeavour to represent, in a slight Etching, Pl. $\frac{xv}{7}$, a little more fairly, what he seems to have intended to describe. Following, very nearly upon a regular scale, the proportions which he himself has given us, in his description; and the ideas which his own words fairly convey to our minds. And I can-



Syrian - Altar



plainly lead us to understand, that *this* was indeed a *Cromlech*, or *Altar*, of nearly the very same form and kind, with that which we have been considering, in Kent. And these words so very nearly resembling those by which our own Antiquarians have so frequently, and so inaccurately, described Kit's Cotty House, lead us to suspect, that in this instance, in Syria, the stones may really be placed just as in the Remain we have been considering, in Kent; that is, two on the sides, leaning a little towards each other; one near the middle, transversely to support them; and one great stone on the top, in a position a little inclined or sloping, and hanging, or projecting, over the rest, on all sides: though the circumstance of the sloping of the top stone is not mentioned by Maundrell; and though, like our own Antiquarians, he might conceive the middle stone, from the deception of the appearance, to have been placed at the *back part* of the structure.

And if this be the case, then we have still remaining, in the country of the antient Phœnicians (which was the real original source of so many of the abominations that spread forth upon the face of the earth), a specimen of the very kind of *Altars* that were used (as Maundrell well observes, *in open temples*), for the horrid human sacrifices, that we know were introduced in the earliest ages, amongst the detestable Superstitions of the Tyrians, and Sidonians; and were, by the British and Gaulish descendants of corrupted Patriarchs, continued long in use, in these parts of Europe.

not but add, that the two Stone Pillars, like Towers, which he describes as seen at some distance; and which have most remarkable sepulchres annexed to them; may probably, on account of some celebrated persons there interred in the most antient ages, have had some connection with those horrid rites, that may have been here performed.

Pococke saw this same most extraordinary remain; and was well convinced of its high antiquity: but following Maundrell's idea, of a *cell*, or *throne*, he has rather perplexed than elucidated the account; by taking two projections of stone, for *seats* on each side, in the throne. Whilst indeed, the representation he has given does not well agree even with the words of his own description; and whilst he also evidently seems too hasty, in giving plans of *door cases*, in the Court, where Maundrell positively speaks only of plain stone pillars; and where even Pococke himself does not venture to affirm that he saw any thing else. The plans of the door cases, seem to have proceeded merely from the imaginations of Pococke's *Engravers here in England*. And as to the rest, he himself says, plainly enough, the *throne* consisted only of *four stones*;—and yet he has represented its inside, as if it consisted of many. See Pococke's Travels, Vol. II. p. 203. Pl. XXX. fig. T.

The height and dimensions of the edifice very nearly correspond with those of the Structure in Kent: for the whole being about 20 feet high; and the piece of rock left for the base, being 3 yards, or 9 feet high: the Cromlech itself will be found to be only about 11 feet in height; whilst the platform, or top stone, was about 17 feet square; that is only a very little larger than Kit's Cotty House. And this top stone, having a sort of cornice carved round it, is only a proof of the addition of a small degree of art added, by the Tyrians, to these kind of structures; in the same manner as we find some degree of art was introduced here by the Britons, in a different instance, to form the tenons, and mortices, at Stone Henge: but the whole still, from Maundrell's plain description, clearly has the appearance of a *Cromlech*.

It cannot have escaped the notice of any curious person, comparing antiquities of a similar kind together, that here also is found a *regular* area, formed as a sort of Court, or sacred place, round the Cromlech; and also *rude stone pillars*, placed in certain order: all which bears an affinity with Druidical Remains.

The whole Court also was open towards the same point of the compass to which the front of the Altar was directed: and therefore open towards that remarkable range of Rock, *cut into regular terraces, or steps*, which Maundrell calls a large Dike; but which seems obviously to have been a range of terraces, like the benches, or risings of a theatre, designed to hold an immense number of spectators:—which might indeed have been used for a sort of *Circus*;—and from, and near which, all that passed on this horrid Cromlech might ever be clearly visible; just as the Cromlech called Kit's Cotty House, in Kent, is so placed, as to be exposed, in the fullest manner, to the view of numberless spectators, at any time, in any part of the magnificent adjacent amphitheatre of hills.

Having found, therefore, such a resemblance of the *Cromlech*, both in Phœnicia, and amongst those barbarous nations who we have reason to think were descended from the Phœnicians; though so long since removed to Mexico; and having seen what horrid rites still remained in use *there*, within a very few centuries; and knowing not only that the Britons were descended from the same common ancestors, but had, also, long intercourse with the Phœni-

cians; we may now, in a more satisfactory manner, proceed to examine what other Remains of this kind exist; the works of the aboriginal inhabitants of this country, who, as well as the Gauls, we are assured, by writers of the greatest authority, practised, in their fullest extent, such kind of abominations.

Besides the passages asserting the fact concerning these abominations, in the writings of Cæsar, Diodorus, and Strabo, we find Tacitus asserting, “*that the Britons held it right, to sacrifice, ON THEIR ALTARS, with the blood of their captives; and to consult the gods by the inspection of human (muscles; or) entrails.*”*

And it ought not to pass unnoticed, that our curious, indefatigable, home traveller, Mr. Pennant, at the same time that he seems too hastily to approve of Dr. Borlase’s idea, that *these Cromleches* were not Altars;—because there was not room, upon them, for fires and surrounding *Druids*; nor was the sloping suited to the placing piles of wood *for fires*; (in which last particular I perfectly agree with him);—yet records a fact of great importance, as a useful testimony, on the present occasion;—for he says,† *almost all (THE CROMLECHES) which I have seen, have AN INCLINATION.*—Which plainly shews how well they were adapted to the dire auguring, and consulting, by the flowing of the blood, as mentioned by *Strabo*.

And at the same time, and in the same page, he mentions the famous Cromlech, called the *Pierre Levee*, near Poitiers in France, which will be hereafter more particularly mentioned; and which is at once a stupendous specimen ‡ of this kind of Structure, existing, WHERE we have a right to expect to find such an one; that is, *in the country of the antient Gauls*; and has its whole form such, as is a confirmation of all that has been remarked.

But whilst I venture to say, that Mr. Pennant was too hasty in assenting to Dr. Borlase’s idea, that *Cromleches were not Altars*; I ought, at the same time, to observe, that Borlase has himself, in this instance, even aided us to confute his own ideas. For (as Mr. Pegge has judiciously observed),§ it appears most plainly, on considering all that he has written, that he had, at last, in reality, *this very notion*

* Taciti Annales, lib. xiv. sect. 20.

† Tour in Wales, Vol. II. p. 237.

‡ Braunii Civitat. v. 18.

§ Archaeologia, Vol. IV. p. 114.

of them himself, in part; and could not but acknowledge that they were Altars, in some instances.

Describing a vast rude stone, or mass of rock,* 19 feet long, *shelving on the top*, round which there is a circle of rude and unequal stones, and which has every appearance of having been a sort of mere *natural Cromlech*, requiring no other stones to support it; he has no scruple to pronounce this, at once, to have been really an *Altar*.

This extraordinary Remain is on the Island of Trescaw, amongst the Scilly Islands. And it is represented, Pl. IX. fig. 2, as a fit companion to the horrid Altar in Kent.

And it may be added that, the word *Cromlech*, in its very etymology, really implies a place of *superstitious devotion*, by means of sacrifice, and auspicy. For Rowland has, with much learning and judgment, observed,† that the antient word *Crom-lech*, by which so many of these structures are now, by tradition, known, is derived from Cæræm-lech; *i. e.* indeed from the Hebrew עָרַם לֵב (or Cærem-luach), a *devoted Stone*, or Altar.

Having produced such a confirmation of the existence of *shelving*, and *sloping* Altars, and of their designation for some sort of sacrifices, even from the acknowledgment of Borlase himself; there needs but little else to be added, for the illustration of this subject, than a simple detail of the plain accounts given of some few other *Cromleches*, that are to be met with in different parts. Only it ought not to be forgotten, that the horrible usage of human sacrifices continued amongst the Britons, even to the very time of the carnage and destruction of the Druids themselves, by Suetonius Paulinus, in the Isle of Anglesey.

Tacitus‡ has given us to understand, that, when the Romans approached, the Britons had great sacrificing fires near at hand; designed for human sacrifices; into which both they, and their Druids, were at last themselves thrown, by their conquerors. These fires are what we may conceive were generally lighted on the flat stones, lying on the ground, like that near Kit's Cotty House, and that at Stone Henge. The words of Tacitus are brief, but descriptive in a most characteristic manner.—*Inferunt signa, sternuntque*

* Antiquities of Cornwall, p. 200.

† In his *Mona Antiqua*, p. 47. 69.

‡ Annal. lib. xiv. sect. 30.

obvius, et igni suo involvunt. And with regard to the British Sacrifices, has been well applied, the nervous description; *Crepitantque preces, Altaria fumant*; alluding both to their *chattering* prayers; and to the wood of the fires of their Altars crackling; and smoking, with the horrid miserable burnings, of the bodies of men, women, and children.*

It is a most remarkable fact, that an instance existed of an human sacrifice, in the northern parts of this Island, even so late as about the year eight hundred and ninety-three.

For when *Einar*, Thane, or Earl of Caithness, had made captive *Haldanus*, Prince of Norway: with horrible solemnity a sacrifice was prepared; and *Haldanus*, the destined victim, was made an offering to *Odin*: and upon his remains a tumulus of stones was raised, to perpetuate the memory of the event.†

And consistently with this horrible account of this custom being so long continued, we find, that in the western parts of *Island*, or *Iceland*, in the province of *Thornesthing*, there was a Circle of Stone, where tradition has preserved the record that men were sacrificed, after they had been killed *at a vast stone* placed therein.‡

As to the instances of *Cromleches* still remaining;—we meet with them, in the first place, in the very spot where, of all others, we might most naturally expect to find them; and that is in the Isle of Anglesey itself.

At Plas Newydd, not far from the present ferry that forms one of the passes into Anglesey, is a vast double Cromlech; of which I have ventured to borrow a Representation, in the first place, from Mr. Pennant.§ Pl. X. fig. 1.

The upper, or higher part, consists of a vast stone, (according to Mr. Pennant's measures, and those mentioned by Mr. Gough), 12 feet 7 inches long; 12 broad; and 4 thick; supported apparently, some years ago, by five tall stones, near the upper end, but now only by three; one 5, the other 3, and the third 3½ feet high: || which

* See also *Mona Antiqua*, p. 86. 97, 98. † See the very curious extracts from Torfæus, published at the end of Cordiner's *Antiquities of Scotland*, sect. i. p. 131.

‡ Arngrim. ex *Eyrbyggja*, *Worm. Mon. Dan.* p. 27.

§ *Tour in Wales*, Vol. II. p. 237.

|| See, as to these facts, Gough's *Camden*, Vol. II. p. 569.

were, most probably, its only original supports, the rest being, *here*, as in other instances, merely appendant ornaments, and therefore easily thrown down. The lower part of this double *Cromlech*, consists of another great stone, barely separated from the first; which is nearly a square, of about $5\frac{1}{2}$ feet, or almost 6 feet; and is supported in like manner by three stones, (one, that for some time formed the appearance of a fourth, being now thrown down).*

Mr. Pennant, on his mention of this curious Remain, adopts, (as has been just mentioned), Dr. Borlase's idea of *Cromleches* being *Kistvaens*, or mere *Cells* for interment. But it is very remarkable, that (as it were in full confutation of his own, and Borlase's conclusion), he immediately proceeds to describe† an exceeding large *Carnedde*, (which indeed was manifestly a sepulchre, or burying place), just by the spot; which he most unaccountably conceives to have been a prison, for confining prisoners *for sacrifice*: retaining strangely some idea of the real use of the *Cromlech*, whilst he both falls into Dr. Borlase's unfortunate error; and more strangely mistakes a deep buried sepulchre, for a prison for living condemned captives.

Rowland says‡ the *Carnedde*, near this *Cromlech*, is one of the largest *Carneddes* in the Isle of Anglesey: in his time hardly to be discerned and distinguished from a mount of earth; the *stones* being overgrown with earth, and moss; and great trees growing thick upon it. And that it stands in a dry bottom; and without any pillars now standing by it.

Since Rowland's time, on its being opened, there has been found, underneath, a *Cell*, about 7 feet long, and 3 wide, covered with two flat stones, and lined with others: and much more truly resembling a *Kistvaen*, than the cavity under the *Cromlech* could; and indeed much fitter for a tomb, than for a prison.

And truly that *Carneddes*, or great and high heap of stones, so called, did really cover *Tombs*, we have a strong proof, from what

* There is an imperfect representation, and description of it, given by Rowland, in the *Mona Antiqua*, p. 93. 99. The measures there mentioned seem, however, to be very inaccurate. But indeed the great inequalities in the height of the several stones, from the inequalities of their position, and of the under surface of the incumbent stone, may easily occasion mistakes.

† *Tour in Wales*, Vol. II. p. 238.

‡ *Mona Antiqua*, p. 95.

PL.

PL. X.



PL.



*A Cromlech at Lanymon, in Cornwall. — & a View of
a Great Cromlech in a Wood in Anglesey.*



appeared on opening another large one in the Isle of Anglesey, not very far from this very spot.

For here was found* a passage, 3 feet wide; $4\frac{1}{4}$ feet high; and about $19\frac{1}{2}$ feet long; which led into a room of an irregular hexagonal form, having the sides composed of six rude slabs, (one of which measured diagonally 8 feet 9 inches); and this little room was covered by one stone near 10 feet in diameter, which was also supported by a rude stone pillar in the middle, 4 feet 8 inches in circumference; whilst all round the sides of the room was a stone bench, on which were found *human bones*, that fell to dust almost at a touch.

To return therefore to the fair consideration of our original *Carnedde*, and Cromlech; we have here obviously, the great Cromlech, for slaughter, with an adjoining lesser Altar; and a great monumental heap of Stones, or *Carnedde*, near at hand, under which was some remarkable interment, designed to be kept in remembrance; and originally perhaps connected with some dire sacrifice here performed.

And indeed, thus far we may fully accede to Dr. Borlase's idea, as to allow, that though *Cromleches* were not, as he supposes, themselves actual Sepulchres; or mere monumental Structures; yet that, both in this instance, and in many others, they were often originally connected closely with places of Sepulture. Because it is well known, that in antient times, amongst the Druids, as well as in the East, horrible human sacrifices, such as might be offered on these Cromleches, were performed at the barrows, and graves, of great Chieftains.

In Pl. $\frac{x}{4}$ is given another View of this great Cromlech, at Plás-Newydd, as seen on the other side, whilst all the five supporting stones, near the upper end, were standing.†

And for the more perfect explanation of the nature of this double Cromlech, I have obtained more exact dimensions of all the parts, than could be had before; which are here given: whilst the outlines of the Stones are also annexed in Pl. $\frac{x}{3}$.

* Gough's Camden, Vol. II. p. 570. Pennant's Tour in Wales, Vol. II. p. 262.

† With this very curious and explanatory Representation, as also with the measures of the several parts, I was furnished by Paul Panton, Esq. a gentleman most accurate in his investigations, and of much erudition, who lives not far from the spot.

A. shews the form of the top stone of the larger part of the Cromlech, at Plâs-newydd; and its dimensions across, in different parts. From whence it appears, that it is 12 feet 9 inches long; and 13 feet 2 inches broad, in the broadest part: whilst its greatest depth, or thickness, is 5 feet.—Its contents, therefore, in cubic feet, and decimal parts, cannot be less than 392,878,125.—And as the specific gravity of one cubic inch of this stone is as 1.6, in avoirdupois ounces, it follows, that the weight of this mass must be no less than 30 tons, 7 hundreds, and 4 pounds.

The two following sets of numbers, shew both the breadths, and the depth, or thickness, in different parts.

| Breadth. | | Depth or Thickness. | |
|----------|-----|---------------------|-----|
| Ft. | In. | Ft. | In. |
| 13 | 2 | 5 | 7 |
| 11 | 9 | 4 | 5 |
| 11 | 4 | 3 | 0 |
| 10 | 3 | 3 | 6 |
| 8 | 9 | 3 | 0 |
| 6 | 3 | 4 | 0 |
| 4 | 9 | | |
| 1 | 0 | | |

The other figures, No. 1, 2, 3, 4, shew the outlines of the four stones that support the North end.—And their dimensions are as follows:

| | No. 1. | | No. 2. | | No. 3. | | No. 4. | |
|-----------|--------|-----|--------|-----|--------|-----|--------|-----|
| | Ft. | In. | Ft. | In. | Ft. | In. | Ft. | In. |
| Length | 5 | 0 | 5 | 6 | 4 | 5 | 5 | 6 |
| Breadth | 4 | 8 | 5 | 6 | 5 | 0 | 2 | 0 |
| Thickness | 1 | 8 | 1 | 6 | 1 | 3 | 2 | 0 |

And the figures No. 5, and 6, shew the outlines of the supporters of the South end; one of which, No. 6, at present lies lengthways, on the ground.

| | No. 5. | | No. 6. | |
|-----------|--------|-----|--------|-----|
| | Ft. | In. | Ft. | In. |
| Length | 4 | 10 | 5 | 0 |
| Breadth | 3 | 9 | 2 | 6 |
| Thickness | 2 | 0 | 2 | 0 |



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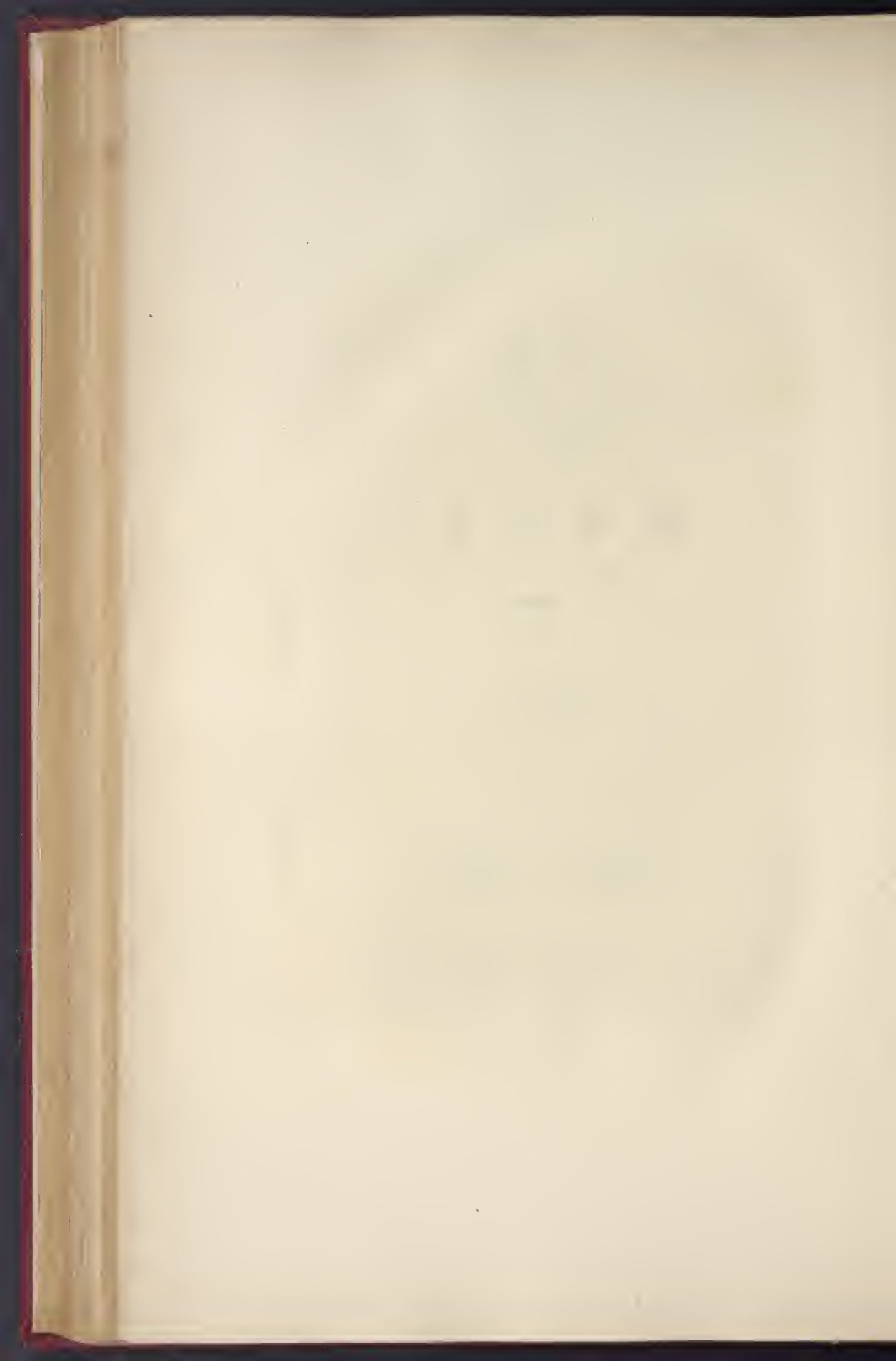
Completed at Paris, Scyphold in England;

Published Paris 1828 by Goussier, Paul, and Son





Stones of the Cromlech at Plas Newydd &c.



And it is very remarkable, that both this top stone, and its supporters, are of one and the same kind of stone; and must have been carried, or rolled, more than a mile; as there is no stone of that sort to be found near the spot.

B. represents the outline of the top stone of the smaller, or lower, part of the Cromlech.—And its dimensions are,

| | | | Ft. | In. |
|-------------|---|---|-----|-----|
| In length, | - | - | 6 | 0 |
| In breadth, | - | - | 5 | 7 |

It has at present only three supporters; but there are three other large stones, of the same kind, lying underneath; which seem to have been intended for supporters; or at least to have had the appearance of supporters in antient time. And these are what occasion the apparent confusion and disagreement in the drawings and descriptions of this Cromlech.*—The three supporters of the lesser Stone, which are now standing as such, are,

| | | | Ft. | In. |
|-----------------------|---|---|-----|-----|
| In length, about | - | - | 4 | 4 |
| And in breadth, about | - | - | 3 | 0 |

Another double Cromlech, not less extraordinary, near an house called *Trevor*, about two miles and a half from *Beaumaris*, in the road to *Plasgwyn*, is represented Pl. XI.

This Remain fully conveys that marvellous idea of stupendous danger, and horror, which was ever in the minds of those wretched Gentiles, whose corrupt superstition destined human victims to appease their false deities, and to grace the obsequies of their fierce Chieftains. The only material difference between this Cromlech, and the former, is, that the second, or inferior Altar is placed a little further off from its lower end; † and that its top is somewhat gibbose.

* It cannot but be remembered that Mr. Pennant, who is so generally accurate, describes the larger stone as supported by five stones; and the smaller one as supported by four;—whilst Rowland represents only three supporters to each stone;—and Mr. Gough says of the great one, *it rested on five stones, but one being detached, and another thrown down, four only bear its weight at present*; which leaves us in suspense whether there were five, or even six supporters to the great Stone. See Pennant's *Tour in Wales*, Vol. II. p. 237. *Mona Antiqua*, p. 93 and 99. Gough's *Camden*, Vol. II. p. 568, 569.

† I was favoured with this curious Drawing also, and the dimensions of the whole, from Mr. Pantor, whose house is at Plasgwyn.

This latter circumstance, however, is a peculiarity of some of the Cromleches, which may be suspected to have been rather of the later ages; and is so conspicuous in one called the *Giants' Coit*, in Cornwall, as to render it exceeding difficult for any one to stand upon it at all. On which account Mr. *Maton*, who describes it,* was led to adopt Dr. Borlase's idea of all Cromleches being mere Sepulchres.

Of the double Cromlech, near Plasgwyn; C and D, Pl. $\frac{x}{3}$, mark the outlines, on a larger scale, of the two top stones; as far as outlines can be marked of such irregular masses. And their dimensions are as follows:

| | | C. | | D. | |
|------|---|-----------|----------------------|---------|-------|
| | | Ft. In. | | Ft. In. | |
| Mean | } | Length | - 7 4 $\frac{3}{4}$ | - | - 8 6 |
| | } | Breadth | - 7 10 $\frac{3}{4}$ | - | - 8 0 |
| | } | Thickness | 2 4 | - | - 1 6 |

And the dimensions of the supporters of these Stones, of which that marked (C) has four in number, are

| | No. 1. | | No. 2. | | No. 3. | | No. 4. |
|-----------|---------|---|---------|---|---------|---|---------|
| | Ft. In. | | Ft. In. | | Ft. In. | | Ft. In. |
| Length | 7 2 | - | 7 0 | - | 5 6 | - | 4 8. |
| Breadth | 5 6 | - | 3 3 | - | 3 6 | - | 4 0 |
| Thickness | 1 0 | - | 2 0 | - | 0 8 | - | 1 2 |

And the supporters of that marked (D), of which two only now remain, though it is supposed there were others, that have been carried away; are in dimensions,

| | No. 1. | | No. 2. |
|-----------|---------|---|----------------------|
| | Ft. In. | | Ft. In. |
| Length | - 7 0 | - | - 5 6 |
| Breadth | - 4 0 | - | - 6 0 |
| Thickness | 1 0 | - | - 0 10 $\frac{1}{2}$ |

In the same Island of Anglesey also, we have another very

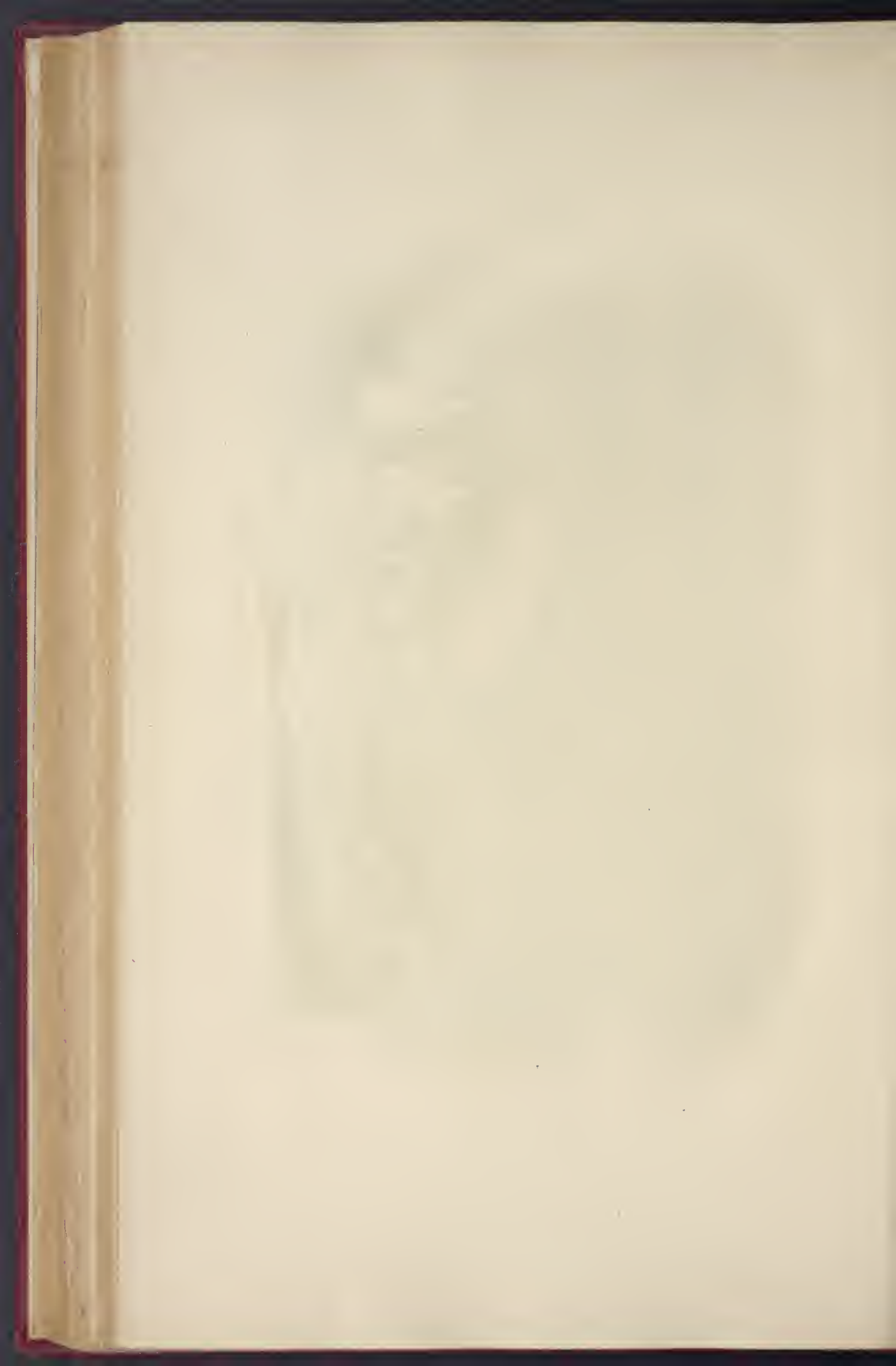
* *Maton's Observations on the Western Counties*, Vol. I. p. 225. He was led also to form the same conclusion, because *no steps* to ascend any of them appear, any where, to remain. But this can be no objection at all; as we have full reason to believe that the antient Gentiles used *ladders merely* for their Altars; since there is a most express prohibition of such usage, in the Divine Law of Moses, in words attended with circumstances that could relate only to a ladder. Exodus, chap. xx. ver. 26.

† I have given all these measures *arranged* exactly as they were given to me.



Double Cradlech near Treowen, Anglesey.

Published for the Proprietors by G. & J. S. 1848.



remarkable double Cromlech; which seems to have escaped the notice of the curious Rowland. It is in the parish of Boddedern, in the second field opposite the ninth milestone from Holyhead.* The larger stone is about 10 feet by 8, and $2\frac{1}{2}$ feet thick; apparently resting on four stones, the highest whereof is 5 feet. The smaller stone, which formed the second, or lower part of the Cromlech, stood on three stones, and was about 9 feet square, but is now thrown down.

There are also remains of a double Cromlech, on the hill overlooking Holyhead.+

And Rowland mentions remains of not less than six other Cromleches,‡ in the same island; one of which, was also clearly a double one.

We find therefore even still, dire traces of the barbarous customs of the Druids in Anglesey, their last established residence, numerous enough to convince us, that if indeed their sacrificing fires, on the landing of the Romans, appeared to be so *many*; there might also have been as many of these kind of *adjacent* Altars, or scaffolds, destined for the slaughter of their victims.§

* See Gough's Camden, Vol. II. p. 572.

+ Ibid. p. 571.

‡ Mona Antiqua, p. 92, 93.

§ I cannot but just remark, on this occasion, that when *Germanicus* approached the hideous spot in Germany, where *Varus* and his army had been destroyed; they saw the skulls of men placed on the trunks of trees: and in the adjacent groves, the *savage Altars*, where, of the Tribunes and principal Centurions, the Barbarians had made an horrible immolation.

“ Truncis arborum antefixa ora; lucis propinquis barbaræ aræ, apud quas tribunos, ac primorum ordinum centuriones mactaverant.” ||

So similar were the customs of all these countries; which were, in those days, deemed the barbarous parts of Europe. Where were retained, in a corrupted state, primæval usages; to which had been added every kind of cruelty, and abomination, that savage ferocity could, in the course of time, engraft upon observances that had even previously been perverted by ignorance and superstition.

And as sacred Groves and Altars are here mentioned as existing in Germany; so it is well known that Groves of Oak were a remarkable appendage to many of the Druidical Altars, and sacred spots, in Britain.

The Oaks, indeed, belonging to most of these sacred places, are now all hewn down. But such Groves we know, from the testimony of many historians, did once exist. And

|| Taciti Annalium, lib. i. sec. 61.

We also meet with such Remains in other parts of Wales ; where we might fairly most readily expect they should the rather exist ; because it was the last and safest retreat of the Britons. And indeed the existence of such Remains here, is a strong proof, amongst others, that they were undoubtedly Structures of British origin, and not raised {as has been sometimes supposed}, by the *Danes* ; because, in truth, the Danes never reached these parts at all, any more than they did the Highlands of Scotland ; where similar edifices are also

Rowland † has very clearly shewn, that the reverence for them was derived from an imitation of the most antient sacred ideas ; though most grossly corrupted. For some of the first sacred places on record, were Groves of Oak, or other thick trees.—Amidst such Almighty God himself appeared to Adam, and to the Patriarchs ;—there Angels were entertained ;—there Covenants were formed ;—and there Oblations, and Sacrifices, were offered.

The veneration, however, which the consideration of these circumstances had first occasioned, soon carried the abuse of the idea, concerning the sacredness of Groves, to such an excess ; that at last, in abhorrence of that abuse, a Divine Command was even given, not to plant *any* Grove at all near the Temple, or Altar, of the only true God.

The name also, as well as the thing, became, in time, horribly perverted ; insomuch that one of the most serious objects of reformation, to the religious Kings of Israel, and Judah, was to destroy those appendages to idolatrous worship, which were called *Groves* ; although it now does most plainly appear, that *such Groves* (notwithstanding the affinity of the word both in antient, and modern language) could not be *Groves of Trees*.

We read ‡ of a *Grove* (τὸ ἄδωος), which Josiah brought out from the house of the Lord, unto the brook Kidron, and burnt it at the brook Kidron, and stamped it small to powder.

We read also of the *setting up of Groves* ; spoken of in exactly the same words as the *setting up of idols*. §

And again of the *making of Groves*, as an artificial work ; just as the making of idols is spoken of. ||

Ahab, it is said, *made a Grove*.**

And we are told †† the Israelites set them up images, and *Groves*, under every green tree, which surely distinguishes such *groves*, from any plantation ; and shews them to have been *carved works*, as much as the images to which they belonged.

And indeed, from the *expedition*, and *silence*, with which *Gideon* is recorded, in the book of Judges, ††† to have cut down the Grove that was by the Altar of Baal, as well as to have thrown down the Altar itself (which probably was of stone, somewhat like those at *Stone Henge*) ; and from the wood of the Grove being not more than sufficient to afford wood for one sacrifice ; and from its being *dried wood*, fit for such a purpose, we may form just the same conclusion.

† *Monâ Antiqua*, p. 56. ‡ 2 Kings, chap. xxiii. ver. 6. § 2 Chronicles, chap. xxxiii. ver. 19. || *Ibid.* chap. xxxiii. ver. 3. ** 1 Kings, chap. xvi. ver. 33. †† 2 Kings, chap. xvii. ver. 10. ††† Judges, chap. vi. ver. 25, 26, 27, 28.

met with, and are called, even at present, *Chapels*, and *Temples*:* and what is more remarkable still, are sometimes denominated by a rude phrase in the language of the country, which signifies a *throne*; an *Oracle*; or *place of Address*; †—just as Maundrell was led, and, probably, somewhat by the language of his interpreters in Syria, to call the *Cromlech*, he there saw on the coast, not far from *Tyre*, a *Throne*.

In Merionethshire, between *Barmouth* and *Harlech*, ‡ (in which latter place, tradition says a British Chief resided, § in an old square tower, even to the latest times of their maintaining their independance); and at no great distance from *Cader Idris*, and very near to two antient British fortresses, called *Castell Dinas Cortin*, and *Castell Craig y Dinas*, there stands, on a vast *Carnedde*, or heap of loose stones, which is 55 feet long, and 12 high, a great double *Cromlech* Altar, at the east end; which is composed of two sloping stones, one placed over the edge of the other, upon five flat upright Stones, 7 feet high in one part, and 4 feet 10 in the lowest. And about 8 yards from this is found, lying flat on the *Carnedde*, without the appearance of any support, another great flat stone that looks like the upper stone of a *Cromlech*. We have therefore here, a *Cromlech* raised on a great mound, or *terrace*; which shews no small analogy between it, and the one described by Maundrell near *Tyre*; and have also a large flat Stone near adjacent, fit for a fire hearth, or *Altar for burning*, as at *Kit's Cotty House*, and at *Stone Henge*, placed on the ground:—and here, as at *Kit's Cotty House*, placed to the westward.

Eleven yards further, is another great heap of Stones; having also a larger *Cromlech* supported with upright Stones, which is now converted into a retreat for a shepherd. And a little further on was still another vast *Cromlech*, whose incumbent stone was 12 feet by 9. And about half a mile from this spot, are two remarkable *Druid Circles*, one of which has the upright stones placed in pairs. All of which circumstances put together, plainly shew the original entirely superstitious designation of this place; and that there were

* Gough's Camden, Vol. II. p. 521.

† See some curious observations of Dr. Garden's, in the *Archaeologia*, Vol. I. p. 315.

‡ Pennant's Journey to Snowdon, p. 111. 120. § See also *Mona Antiqua*, p. 148.

here, on certain occasions, more than one horrid fire, as well as in *Anglesey*, when the Romans brought the final vengeance on the whole Druidical race.

At no great distance from this spot also, in a place called *Bryny-Voel*, is another great Cromlech; the upper stone of which is 16 feet 4 inches long,* and 7 feet 4 broad, and near 2 feet thick, which is placed only 2 feet above the ground, supported by small stones, and is (like the *rock Cromlech* mentioned in Cornwall), surrounded with a Circle of loose stones.

In Caernarvonshire again, not far from *Penmaen Mawr*, on the top of which mountain is a most celebrated and ancient British fortress, we find, in the neighbourhood of several British Circles of Stones, remains of a Cromlech; which seems to have stood, like that at Abury, in the centre of one of the Circles. And at about the distance of a quarter of a mile is a large Carnedde.†

In the same county also, near *Ystymkiged*, are three more Cromleches, joining to each other; which Mr. Pennant supposed might be Memorials of three Chieftains slain on the spot;‡ though the neighbourhood of a great Druidical Circle of thirty-eight Stones, on *Bwlch Craigwen*, near Clenenny, seems much more strongly to indicate that they were, in reality, *appendant Altars*, like those in *Anglesey*, and *Merionethshire*.

In short, the whole Principality of Wales, where the Welch had their last retreat, does, by the remains of its antiquities, speak one uniform language in this point.

In *Pembrokeshire*, near *Pentre Evan*, in the parish of *Nevern*, in the midst of a great Circle of Stones, 50 feet in diameter, is a vast *Cromlech*, consisting of an upper stone, 18 feet long, and 9 broad, and 3 feet thick, supported by three large rude stones, about 8 feet high, with five other apparent supporters, *which do not at all contribute to its support*; and near it lies on the ground, another mass of the same kind of stone, being a great slab, or sort of Altar, as it were for fire, 10 feet long, and 5 broad; which some persons have supposed to have been broken off from the other. §

* Pennant's Journey to Snowdon, p. 112.

† Pennant's Tour in Wales, Vol. II. p. 308.

‡ Ibid. Vol. II. p. 189.

§ Gough's Camden, Vol. II. p. 521.

So in Brecknockshire, on the top of an hill, in the parish of Llan-Hammwich, is a Cromlech composed of four large flattish rude stones; three of them pitched in the ground, and the fourth laid on them as a cover, forming a cell, open in front, about 8 feet long, and 4 wide, and high.*

This seems to have been very nearly such a sort of edifice as *Kil's Cotty House*. But having some rude marks, and cross lines, cut on the side stones; if those marks were not merely the rustic cuttings of idle persons at various times, they seem to indicate (like the *tenons* on the supporters at *Stone Henge*, and like *the Cornich* on the Cromlech, in *Syria*), that this Cromlech, in Brecknockshire, was reared in the ages when Druidism was wearing out.

In Cardiganshire, the well known remain called the *Giantess's Stone*,† is a vast mass, apparently supported by four other stones, about 5 or 6 feet high; besides which, it has two more pitched on end like supporters, though too low to bear any of the weight, as is most probably the case with the fourth stone. It stands on a small eminence, in a plain open field; and at a little distance are two, or more, large stones lying on the ground, one of which might serve for the fire hearth. Whilst, at some distance, is a sort of stone of Memorial.

There is also in Cardiganshire,‡ in the parish of *Lhan Goedmor*, a vast rude stone, 8 or 9 yards in circumference, and at least half a yard thick, placed in a reclining position; one side on the ground, and the other supported by a stone about 3 feet high; which seems therefore, in its appearance, to have some resemblance to that which Borlase calls the *Altar Stone* at *Trescaw*, in *Scilly*.

Not far from this is another smaller, of the same kind; and also a *Circle of Stones*; and five small *Kistvaens* uncovered, scarce 2 feet long, formed of rude stones pitched in the ground. And about 6 yards from it lies a stone on the ground, which might serve for the fire; and there is also another lying at much the same distance beyond that, in a manner not very unlike the position of the two great *flat Altar Stones*, on the ground, at *Stone Henge*.

There is also a still larger stone of this sort, near *Llan Edern*, in

* Gough's Camden, Vol. II. p. 476.

† Ibid. Vol. II. p. 528.

‡ Gough's Camden, Vol. II. p. 528. Description of England, Vol. I. p. 283.

Glamorganshire, lying in this sloping position, with one end on the ground, and the other supported by a rude stone about 2 feet high. It is somewhat of an irregular oval form, and is about 4 yards long, and 2 broad.*

And there is besides this, in *Glamorganshire*, on a mountain called *Kebyn Bryn*, two or three miles from *Penrise*, a rude stone of prodigious size, about twenty ton weight, called *Arthur's Stone*, † which appears to be supported by six or seven other stones about 4 feet high; from which, being of the *millstone* kind, several fragments have been broken off, from time to time, for use.

And on this occasion, we ought not, by any means, to forget the three very remarkable *Cromleches*, mentioned by *Mr. Brereton*, as standing in some grounds in the parish of *St. Nicholas*, about sixteen miles eastward from *Newton*, in *Glamorganshire*.‡

The upper stone of the first, is about 18 feet long; and 15 broad; and 21 inches thick. And it is supported by three stones; the back, or middle one of which is near 15 feet broad.

The second is rather less in dimensions; and sunk lower in the ground.

The third is quite perfect, in its antient form; and full 8 feet high.

All three stand on high ground; open to the east; and are in full view of each other.

In *Caermarthenshire*, in *Lhan Boudy* parish, is a rude stone, about 30 feet in circumference, and above 3 feet thick, supported by four others, about 2½ feet high.§

And as we find such stupendous Remains of these *Cromleches*, in *Wales*, and particularly in *Anglesey*, where the *Britons* and *Druids* had their last retreat. So, as we might reasonably expect, there are still more remarkable *Antiquities* of this kind, in the *Island of Jersey*; where was another place of refuge, in their latter end; and which had been indeed an original establishment of the *Druids*, perhaps even prior to the former, if we may judge from the rudeness of the Remains.

In *St. Helier's* parish, about a mile north-north-west from the

* See the account from *Lluyd*; and in *Gough's Camden*, Vol. II. p. 528.

† See also *Gough's Camden*, Vol. II. p. 503.

‡ *Archaeologia*, Vol. III. p. 116.

§ *Gough's Camden*, Vol. II. p. 510.

town, on a rising ground, stands a great *Cromlech*, which consists* of a vast stone, $11\frac{1}{2}$ feet long, 10 broad, $1\frac{1}{2}$ foot thick, at the west end, and above 2 feet at the east end, supported by three stones, each near 5 feet high, and as much wide; so that both its appearance and size nearly resemble *Kil's Cotty House*; and, like that, it has a stone lying at a small distance on the ground, seeming to have been an Altar for fire, about 7 feet long, and 5 feet broad. There is also standing hard by, a sort of Stone of Memorial; and one other. And at about the distance of half a mile, was a *Tumulus*.

Again, on the south-east side of the town, on another *Tumulus*, or small hill, is another *Cromlech*, consisting of a vast Stone; 15 feet long, $6\frac{1}{2}$ feet broad, and 4 feet thick; supported, like the former, by three other great stones. And here again, at some small distance to the west, and lying on the side of the *Tumulus*, on the ground, is another great stone, which might serve as an Altar for the fire, being 7 feet long, and 4 broad. There are also some other large stones on the north side, now thrown down. And on the east side is another, 12 feet long, $3\frac{1}{2}$ broad, and between 2 and 3 feet thick, now lying prostrate on others, but which, from its form and dimensions, may be concluded to have stood erect formerly, and to have been originally a Stone of Memorial.

Still further; † on the town hill, is another *Cromlech*, consisting of a stone 14 feet long, by $7\frac{1}{2}$ broad, and above 3 feet thick, supported in appearance by five others. ‡ On the east-south-east side of which, stood a *Circle of Stones*.

And in *Groville* parish, near *Mont Orgeuil* Castle, on a *Tumulus*

* See Gough's Camden, Vol. III. p. 751.

† Ibid. Vol. III. p. 751.

‡ This seems to be the same that is described in the *Gentleman's Magazine* for 1784. Vol. LIV. p. 809; but which is there said to be supported by six stones, about 2 feet from the ground; for it is very remarkable, that in the engraved figure, which accompanies that description, there are only five supporters visible.

It should be mentioned also, though it seems hardly proper to be made use of as any illustration of the present subject, that in St. Martin's parish, in Jersey, on a cliff near the sea, within an oval circle of twenty-one erect stones, is a very singular Structure, consisting of fourteen stones standing up in two rows, seven on each side, and supporting three large flat stones, each of which are about 6 feet over. And there are also, two large stones at each end, without the Circle.—See Gough's Camden, Vol. III. p. 751.

The Circle of Altars, discovered in 1785, on the top of an high rocky hill, near St. Helier, has been already mentioned.

in sight of the sea, is a *Cromlech*, formed of a stone 15 feet long, $10\frac{1}{2}$ feet broad, and $3\frac{1}{2}$ feet thick, supported by five others.

In the Island of Guernsey also, there are at least three Cromleches; in the part called *Le Clos du Val*; one of which is called *La Pierre de Debus*, and points east and west, and has the upper stone $15\frac{1}{2}$ feet in length; and 7 feet $4\frac{1}{2}$ inches in breadth; and 4 feet $5\frac{1}{2}$ inches in thickness.*

And there are traditions of such having been extant, within memory, in the Island of Jona, which probably derived its first original estimation for sanctity, like Anglesey itself; from having been a Druid retreat and residence. A circle of stones, and a cairn found there, confirm this idea.†

Next to these Islands of Anglesey, and Jersey, and Guernsey, and to the Principality of Wales, we may most reasonably expect to find a considerable number of the Remains of these sort of Altars, in *Cornwall*; where the aboriginal Britons maintained their ground more firmly than in any other part of this country, except Wales. And, indeed, here we do find them in such abundance, and they have been so clearly described by Dr. Borlase, that there needs no further mention of them, on this occasion, than a mere reference to his whole account;‡ wherein, however, it cannot but be observed, that although he was so strangely led to adopt the idea of their being *Kistvaens*, or mere chests, and tombs, for interment, yet the whole tenor of his observations does really confirm all that has been here said; and he himself seems clearly to have been compelled, against his will, to adopt the idea that some of them at least certainly were Altars.

One of them, where he acknowledges there is no *Kistvaen*, is so remarkable, that I cannot but borrow a representation of it, Pl. X. fig. 2. for the more complete illustration, and confirmation, of all that has been advanced. As on that account alone so very many of these Remains in different parts, have already been so particularly, and almost tediously, described, and enumerated.

* There is a slight representation of this Stone in the Gentleman's Magazine for 1706; p. 573. Pl. II. fig. 2.

† See Pennant's Voyage to the Hebrides, p. 258, 259.

‡ Antiquities of Cornwall, p. 227.

This great Cromlech is situated at *Lanyon*,* in the parish of Madern, in Cornwall; on an artificial bank of earth, not 2 feet higher than the adjacent soil, but about 70 feet long, and 20 feet wide, and extending in its length, north and south. The upper stone is 19 feet long, and more than 47 feet in circumference: its thickness on the eastern edge, is 1 foot 4 inches; and on the western edge, 2 feet. It is placed on four great stones, (one of which does not appear from the figure to bear any part of the weight); and it is placed so high, that a man can sit on horseback under it. At the south end are many rough stones, placed without regular order, but manifestly with some design. And at about 80 yards distance west-north-west, there stands an high stone, like a stone of Memorial.

In the parish of Portisham, in Dorsetshire,+ is a considerable *Cromlech*, consisting of a Stone 10 feet in length, and 6 in breadth; apparently resting on nine others; though it cannot be supposed that they all contribute to support its weight.

Cromleches also, as well as all other aboriginal Remains, conformable to British superstitions and usages, are to be met with in Scotland.

In Lothian, † south of the road to Falkirk, among the hills, is a large Cromlech; and near it a Circle of Stones, with one or two in the centre; and on a neighbouring little eminence, is a conical stone, set on its end. And in the country adjoining, are remains of several Cairns.

At *Oldeer* also, not far from Inverugee, in the northern parts of Scotland, on the top of an hill, is a Druidical Circle of Stones, that has already been referred to on another occasion, where are remaining three great stones § in the middle, that formerly supported a Cromlech of enormous size. And near this Circle are even vestiges of Cells of the Druids.

In Ireland also, we find, as in other instances, so in this, strong Remains of such edifices, and superstitious abominations, as are conformable to the corruptions of those corrupted Patriarchs, from whom both they and so many other western nations were derived.

In the county of Cork, at *Castlemary*, not far from Cloyne, is a

* See Antiquities of Cornwall, p. 231.

† Hutch. I. 533; and Cough's Camden, Vol. I. p. 54.

‡ Gough's Camden, Vol. III. p. 318.

§ Cordiner's Antiquities, p. 44.

Cromlech, called *Carig Croith*, or *the Sun's Rock*; or *Col's Rock*;* which consists of a Stone 15 feet long, and 8 feet wide, supported by three other large ones, at the height of 9 feet from the ground. And near adjoining, lies on the ground a large round flag stone: so that both in its dimensions, and form, and height, and even in one of its names, as well as in the having this appendant hearth stone, or Altar for fire, on the ground, it bears no small resemblance to *Kit's Cotty House*.

Again; in the same county, two miles from *Castle Hyde*, is a great *double Cromlech*, called *Leaba Gallych*, or *the Warrior's Bed*; and sometimes *Labacally*, or *the Hag's Bed*;† consisting first of a vast stone, 17 feet long, 9 feet broad, and 3 thick, sloping to the edges; and supported by stones, some whereof are 6 feet high. Near to which stands another stone, 11 feet long, and 7 feet wide, supported also on upright stones; and then a third, supported in like manner; 7 feet square. And before them, at the west end, lies a fourth stone, on the ground, as if for the fire hearth. Whilst the whole is inclosed in a great circle of flag^s stones standing erect.

From its old name, *the Warrior's Bed*, or *the Hag's Bed*, some have been induced to suspect that here was some Tomb, or Interment. But if it ever was so; these Altars seem plainly to have been *no Kistvaens*, but designed for horrid sacrifices: as we well know human sacrifices were offered at graves, in old times, on certain occasions; and even at the tomb of Patroclus, by *Achilles*, who we are taught to consider as one of the most potent, and most civilized of the Grecians, in the time of the Trojan war. If, therefore, any warrior, like *Odin*, was buried here; it nevertheless does by no means contradict the idea we are led to form concerning the abominable use and design of these edifices: for, like *Odin*, he might be honoured by abominable rites. Though it is much more likely, that this antient name was given to this *Cromlech*, merely in consequence of the frightful idea, which the superstitious rites of idolatrous sorcery, and divination, here performed, conveyed to the minds of common people.

* Smith, Vol. I. p. 147. Gough's Camden, Vol. III. p. 507.

† Smith, Vol. I. p. 356.—Vol. II. p. 490.—And see a Representation of it in Gough's Camden, Vol. III. Pl. XXXV. fig. 9. p. 477.

And indeed, to cut the matter short at once, concerning the dispute between different writers, as to the original design of these Cromleches, whether they were at first intended merely for *Tombs*, or for *Altars*; it may be observed in general; that all antient superstitions, and corrupt idolatrous practices, were so much connected with the deification of deceased heroes, warriors, and oppressors, that unavoidably, some of their most sacred and direfully venerated Altars, and also some of their sacred Circles, where dances, and superstitious turnings and processions round, were solemnized, must have been connected with the interment, and supposed preservation of the Remains of such heroes; just as, in later dark ages, churches designed for the worship of Almighty God, were connected with, and contained the shrines of, supposed Saints, like Thomas a Becket.

Thus we find, that in the centre of two such Circles in the county of Louth, were discovered human bones,* and the broken parts of urns that contained them, made of a sort of baked clay. In which instance, it is just as unreasonable to conclude, that these Circles were mere Sepulchres, or Monuments; as it would be to conclude, that Canterbury Cathedral was no place of worship, but only a Monument of Archbishop Becket.

Just so *Cromleches*, where bones are, or may, possibly be found; are surely by no means to be considered as mere tombs, when so many corroborating circumstances lead us to be assured, that they had another, and more dreadful use; whatever remains of departed warriors, or giants in vulgar estimation, might be deposited either under them, or near to them.

And this may tend to explain, in some degree, the original history, and designation, of those two Cromleches in Ireland, under which have actually been discovered human bones; and under which *alone* human bones have ever been discovered; notwithstanding the various researches that have been made.

The first of these is in the county of *Sligo*; where, at a place called *Lugna Clogh*, or the *Giant's Grave*, near Sligo, is a sort of Cromlech of large stones, under which such bones have indeed been found. †

* Wright's Louthiana, book iii. p. 8.

† Wilson, p. 93.—Gough's Camden, Vol. III. p. 590.

And another Cromlech is said to have been thrown down on the *Ballrichan* estate, in the county of Louth: when, the ground under it being opened, there was found, about 2 feet deep, inclosed and covered with flat broad stones, great part of a human skeleton, crowded together in a bed of blue greasy earth, as if originally lodged in an urn. And with the bones were mixed some pieces of hard clay, about the thickness of one's little finger. And a yard deeper, under another flat stone, were several other large bones; but whether human or not was uncertain.* And on a still further examination of this spot, and digging further down, it appeared, that there were many regular stones of a considerable length, placed at bottom, very deep; and that the whole seemed to have been built up regularly, on purpose, to strengthen the three great props that supported the upper stone of the Cromlech, and to prevent their being forced down into the ground, by the immense superincumbent load.

All this, however, plainly discovers a design, for the erection of somewhat of much more importance than a mere *Kistvaen*, or Sepulchre. And indeed, in this very county of Louth, we have another instance of a most remarkable Cromlech, of which the *very name*, still preserved by tradition, shews the original dreadful use.

It is called the *Killing Stone*; and the hill on which it is reared, is called, to this hour, *Killing Hill*. The name indicates *Slaughter*. And the *Cromlech Altar*, which, from the figure given of it, + greatly resembled *Kit's Cotty House*, and which Wright calls the Cell for sacrifice; was placed on the highest summit of the hill; and surrounded by a Circle of pyramidal Stones, (like that formerly at Abury).

Upon a very near adjoining summit also, was another Circle of Stones; which might surround the flat Altar on the ground, for burning. The whole, there is reason to think, was surrounded by a wood of oaks; and must have produced, altogether, a magnificent, and vastly awful, appearance, to rude minds; especially when approached from the south.

But what is most remarkable, and connects this Cromlech Altar more particularly with Druidical Superstitions, and horrid detestable

* Wright's Louthiana, book iii. p. 12.

+ Louthiana, book iii. p. 13.—Pl. VI. and VII.—fig. A.

Rites, performed in the latter ages of their prevalence, is, that upon the principal Stones that form the Altar, are found spiral figures, resembling the celebrated *snake stones* of the Druids; which, indeed, have been supposed to have been carved; but which were most probably merely the fossil impressions of the *Cornua Ammonis*, in the original stone; of which the Druids might, in this instance, avail themselves, as they did, in other instances, of the loose smaller fossils of that kind.

Whether, however, these appearances, upon the stones, were mere accidental impressions of the *Cornu Ammonis shell*;—and whether the stones were particularly chosen for the purpose, because such impressions were found upon them;—or whether they were really rude carvings with any tool;—it cannot be beside our purpose to call to mind, some circumstances relating to the attention paid to *the Serpent* (whose form the *Cornu Ammonis* resembles), by many heathen nations.

The learned Mr. Bryant has made several very curious observations,* concerning the general connection of a superstitious regard for *the Serpent*, with the abominable rites of idolatry, in Syria, and in Egypt, and in Crete, and in Greece:—and has shown that it was originally derived from the *Chaldeans*. It unquestionably therefore prevailed amongst the *Tyrians*, and *Sidonians*.

And on that account it much deserves our notice, that as the great Cromlech Altar (as we may, indeed, truly conceive it to have been), mentioned by Maundrell, in Syria, was situated near to what was called the *Serpent Fountain*; †—so concerning the great Temple at Mexico, where was a great Altar for human sacrifices, (which I have in the foregoing pages adverted to, as having had originally a connection with the Cromlech), we are informed by *Joseph de Acosta*, and *Antonio de Solis*, ‡ that the Wall of the great Square, inclosing the whole, was wrought, on the outside, with various knots of *Serpents* intertwined.

The Druids, we know, had some sort of superstitious reverence for *the Serpent*. And as there seem, in so many instances, to have

* Analysis of Ancient Mythology, Vol. I. p. 473. 478, 482.

† See Maundrell's Travels, p. 20; and also Pococke's Travels, Vol. II. p. 203.

‡ History of the Conquest of Mexico, Vol. I. p. 321, 322.

been a connection between *their* ideas, and those of the antient corrupters of religion, in the Patriarchal countries; so on this occasion another resemblance may very well be brought to mind.

For as we are well informed how celebrated the Druids were for the songs of their Bards, accompanied by the harp; so Mr. Bryant has remarked,* from unquestionable authorities, that the songs of the *Canaanites*, and *Cretans*, which accompanied their horrible human sacrifices, and cruel rites, were particularly plaintive, and melodious.

We have the strongest proofs that can be expected, of the real existence of the *Druids* in Ireland,† even in the days of St. Patrick. The name of Druid is also to this day, in the Irish tongue, applied to a *Cunning Fellow*, or *Wizard*. And *O'Donnel*, an old translator of the New Testament into Irish, was thereby even led to call the *Wise Men of the East DRUIDS*. There are also remaining, an *Astronomers' Hill* belonging to them, called *Carrick Edmond*, which cannot but remind us of the *Cerrig Edris*, or *Astronomers' Mountain*, in Merionethshire, in Wales: and there is also an *Astronomers' Circle of Stones*, not far from Dundalk, called *Carrick Brauda*,‡ corresponding very nearly in name with the *Cerrig Brudyn*, or *Astronomers' Stones*, that existed in Anglesey, where also is another *Caer-Edris*, or *Caer-Idris*.§

As the latest existence of the Druids, and of their imitators, was in Ireland; so it ought to be remarked, that in Ireland too there seem plainly to have been some strange, and irregular imitations of Cromleches, in ages *after* the real Druidical times: of which fact, a Cromlech, on the top of *Slive na Grideal* mountain,|| in the county of Down, may serve as a proof; which is shaped like a lozenge, 11 feet long, and $8\frac{1}{2}$ feet wide; and $1\frac{1}{2}$ foot thick; and is placed on *two* stones only; one 8 feet high; and 3 broad; and 1 thick; and the other not above 3 feet high.

And again, in the same county, we find a place called the *Giant's Ring*; which is an earth-work, 842 paces in circumference, having

* Analysis of Ancient Mythology, Vol. II. p. 17, 18.

† Ogygia, p. 58.—Matthew Kennedy, p. 19.

‡ Louthiana, book iii. p. 6.

§ Rowland's Mona Antiqua, p. 84.

|| Gough's Camden, Vol. III. p. 620.

in the centre a Cromlech, of 7 feet by 6, supported by two ranges of seven pillars; and round it, at 4 feet distance, several stones 2 feet high.*

And as the usage of erecting a sort of *Cromleches* seems to have continued in this rude manner longer, and more recently, in Ireland, than in any other parts of Europe; so in the same country, there are also other vestiges of interments being connected with Altars, and Sacrifices, and Burnings, and Circles of Stones, somewhat resembling Druidical Circles, of a more variable, and manifestly later construction, than any of those in Britain.

Of this there seems to be a very singular proof, in a most remarkable Circle of Stones, in the county of Dublin: which is so unlike any thing Druidical in reality, when narrowly examined; and yet has such a strange connection, in part, with the imitations, and external appearances, of Druidical Memorials, that it would be most unpardonable not to mention it on this occasion; though it only tends to shew, how *external appearances* may be resembled, and names assumed, after the original design of things is changed.

At *Mount Druid*, not far from *Dalkey*, † is a Circle, 135 feet in circumference, composed of large stones set upright; and within the area are three tombs, or altars; and a *circular figure* cut in stone. And near to them was discovered, in 1787, below the surface of the earth, a great number of tombs, or stone coffins, composed of thin flag stones, and in the form of our modern coffins. They had no flags at bottom, but were nicely covered at top, and laid side by side. A great number of skeletons lay near them without coffins. And they were only about 2 feet below the surface, and laid in rows. And on the top of *Dalkey-hill*, is an immense stone, something like a Cromlech, called *Clogh-hobber-gilline-stone*.

So near *Dungannon*, in the county of *Tyrone*, on an hill, are two Circles of Stones, forming a figure of eight; each about 20 yards diameter, inclosing *urns* in holes, set round with six stones, and covered with flat stones, and other stones thrown on the top. And about 30 yards to the east of these circles, was a kind of Altar of dry stone, 8 feet long, and 4 feet wide;—and both coals, and

* Gough's Camden, Vol. III. p. 622.

† Wilson, 287; and Gough's Camden, Vol. III. p. 559.

bones, were discovered by it among the stones, which had the marks of fire very obviously remaining.

And at the east end, of this sort of Altar, was a pit, into which the remains, after burning, were plainly thrown; insomuch that a black greasy substance had tinged part of the hill, in a straight line from the pit.*

These irregular appearances it is needful to mention, to prevent mistakes; and in order to lay the whole detail fairly before the eyes of the curious and intelligent. And, for the same reason, it would be an omission not to add a short recital of the rest of the most distinguished Cromleches, of the more usual and regular antient kind, that have been taken notice of in Ireland.

In the same county of Cork, where the *Warriors'*, or *Hags' Bed* is found, is another Cromlech; and a Circle of Stones; situated a little to the east of what is called *Carickafouchy* Castle, or *Fairy Rock* Castle; where the very name seems to indicate a connection with antient Superstitions.

The Castle stands on a rock, accessible only on one side, and to one person.† And in this neighbourhood also, are other Circles of Stones, with single Pillars, like *Pillars of Memorial*, standing at a small distance. All which seems to be a further confirmation of the superstitious designation of the whole.

We have the representation also given us of a very large Cromlech, having the great upper stone placed in a sloping position on three others; which stands on the borders of Loch Cool, Galway; the upper stone being 15 feet by 12.‡

In *Wicklow*, on the top of a very high mountain, called *Lug-na-Cullach*, north of *Baltinglas*, is a large Cromlech. And there is another in the Park of *Baltinglas*.§

In the county of Louth, near Dundalk, || is a Cromlech of a kind of oval form; 12 feet by 6; weighing between thirty and forty ton; and resting on three others. It is called the *Giant's Load*; and pretended to have been brought hither, all at once, by *Parraghbough M'Shaggean*, a giant; whose grave, a cell of stone work, 20 feet

* Philos. Trans. No. 537. G.—Gough's Camden, Vol. III. p. 638.

† Gough's Camden, Vol. III. p. 505.

‡ Ibid. Vol. III. Pl. XLVII.

§ Ibid. p. 603.

|| Ibid. Vol. III. p. 551.

¶ Ibid. p. 603.

by 5, they shew near it. On which occasion it is obvious to remark, that if this Cromlech, ever had any connection with the memory or interment of any antient warrior, this Stone Cell, and not the Cromlech, was the *Kistvaen*.

In the county of Down, near *Dundrum*, is a Cromlech, 10 yards round; 3 broad; and 4 or 5 feet thick: placed on *three* stones, 4 feet high.*

And in the same county, in the parish of Drumgoolan, on a mountain, is another Cromlech, 11 feet long; 5 feet broad; and about 2 feet thick; placed also on *three* stones, about 6 feet high.†

In the county of Tyrone, on the verge of the county of Derry, is a great Cromlech, or *inclined stone*; 10 feet in length; and 28 in circumference; ‡ supported by six upright stones: the highest of which is about 5 feet above ground, and 2 at least under it. So that this Cromlech appears to be about 7 feet high, at the east end, and about 3 at the west end.

In the Introduction to Mr. Grose's Antiquities of Ireland, is a representation § of a very remarkable Cromlech at *Tombins*, or *Tobin's-Town*, in the county of Carlow, in Ireland, the upper stone of which is 23 feet long; and 18 broad at one end, but only 6 at the other; and from 2 to 4 feet thick: the upper surface of which is convex, and has one large channel, and other small ones, branching from it, that have almost the appearance of being artificial; and evidently seem to have been designed for some superstitious use.

There is also another as remarkable Cromlech described; || as being on Brown's hill, about a mile and a half from Carlow. And here also the great sloping Stone is above 22 feet in length, and 18 feet in breadth.

Such are the Cromleches that are to be met with in Great Britain, and Ireland. And it is no wonder that so many of them, are still remaining in the latter island; when we consider that Pagan Rites, and Druidism, actually continued there, so late as the year 432.**

As in other instances of primæval manners, and customs, so in

* Gough's Camden, Vol. III. p. 619.

† Ibid. p. 623.

‡ Ibid. p. 638.

§ Antiquities of Ireland, Vol. I. Introduction, p. xi.

|| Ibid. p. xii.

** Usher, Prim. p. 852.—Ind. Chron. p. 430.—Borlase, p. 155.

this, of the use of the Cromlech, other nations, derived from the same first ancestors, have left similar proofs of their customs ; which cannot well be accounted for from any imitation of the Britons ; any more than the appearances in Britain can, with any consistency, be supposed to have been derived from any connection with those nations.

In the countries first inhabited by the Gauls and Danes, there are remains of these sort of Structures ; which have led hasty observers to suspect, that the very first origin of such edifices, was either amongst the antient Danes, or Gauls ; and was from thence brought into Britain. But they might surely just as well have concluded, that their first original fabrication was in Britain ; and that the imitation of them was from *thence* conveyed to the northern parts of Europe, and to Gaul. And neither in the one instance, or in the other, would the conclusion be true.

We have seen, that there is still existing, a specimen of these Structures, in that part of Syria, in the East, which was the source of the most abominable Corruptions, and Institutions, that perverted the whole Gentile world.

And as a further proof of the origin of the rearing of Cromleches having been in Eastern parts of the world, and neither in the north, nor in Britain, we have an account of somewhat similar Structures, in the island of Minorca ; where the great antiquity of the inhabitants has always been spoken of, in the strongest terms ; even in the earliest ages.

The Structures there, that have this sort of resemblance to Cromleches, are by the natives of the Island, to this day, called *Altars of the Gentiles ; or Heathen Altars*.*

There are many of them in the island. And one of the most remarkable of them is thus described.

It stands about two miles to the eastward of *Alaior*, on an eminence ; and is inclosed by a Circle about 200 yards in diameter, formed of large flat stones, set on their ends close together.

In the centre of this inclosure is a huge mass of great rough Stones, piled on each other, without mortar, in a sort of conical

* Armstrong's History of Minorca, p. 215. 217.

figure ; being about 90 feet in diameter, and near as many in height (resembling what we call *Cairns*, or *Carneddes*, in England and Wales) ; and having a cavity and narrow entrance, now open, at the base : and a special path of ascent, about 3 feet broad, on the outside ; with a flat area on the top, only large enough to hold six or seven persons.

At some distance from this Pile, or *Cairn*, and within the same circular inclosure of stones, stands (what is called *the Gentile Altar*) ; the mass that has such affinity to the *Cromlech*.

It consists of a great upper stone, 16 feet long ; 7 broad ; and about 2 feet thick ; which is placed nearly horizontally, at the distance of almost 12 feet from the ground ; being supported by another stone, of very similar dimensions, standing on edge, and fixed in the ground even much below the surface. The upper stone rests upon the upper broad edge of the other ; and neither one, nor the other, seem to have upon them the mark of any tool.

There are several such *Cairns* in *Minorca*, as this which has been described. And they are so placed, that from any one of them you may always see some other. And near each is constantly found such a sort of *Altar*.*

As the upper stone of that which has been just described is placed nearly horizontally ; and as it is supported in so singular a manner ; it has some appearance of having been used as an *Altar of Oblation* (like some of those which have been mentioned, in the preceding observations concerning *Stone Henge*), rather than as a *Cromlech* ; but as its bulk, dimensions, and height from the ground, have a proportion and resemblance so much nearer to that of the *Cromlech*, it was nevertheless more proper, to mention it on this occasion.

And as we have mentioned this Structure in *Minorca*, so, in like manner, what has been called a sort of *Stone Henge*, in *Friesland*, † deserves now to be taken notice of.

In *Drenthe*, in *Over Yssel*, near *Coeworden*, on the borders of *East Friesland*, are heaps of Stones ; from 16 to 25 paces in length ; and

* Armstrong's History of *Minorca*, p. 217, 218.

† It is mentioned in the *Gentleman's Magazine* for 1788, Vol. LVIII. p. 195. 318 ; with references to the pages in the German printed book, where it is described at large.

from 4 to 6 paces in breadth: and here also, upon smaller stones, are laid others of immense weight; some of which are 56 feet in circumference;* (and therefore must be from 14 to 18 feet in length, and breadth; nearly resembling the dimensions of our large Cromleches).

There is also, besides these;—a large mass of this kind, near *Saltzberg*;—another of amazing size at *Embsuir*;—and there are several others also, in parts adjacent† to Friesland.

And Dr. Brown informs us,‡ that in the road through *Lower Saxony*, he found rows of great Stones, like those mentioned by Wormius, in Denmark; and that in one place particularly, he took notice of three massy stones placed in the middle of a large square space, encompassed by other large stones, set up on end. As we may recollect the Altar in Syria was also in the midst of a square space.

And as a still further proof of the connection of these sort of Structures, with persons, manners, and observances of a similar kind with those of the Druids; and deriving their customs from the same primæval sources; it ought not to be omitted, that near one of those Cromleches, which are still called *Heathen Altars*, in *Minorca*, was found an *Earthen Bead*,§ of near an inch in length, and three-quarters of an inch in diameter, with an hole through it; which greatly resembled those *Druidical Beads* which have been so often found in Wales, and in different parts of Britain.

It remains only to observe, that as the rude *Stone Pillars* of the corrupted Heathen nations, are particularly mentioned in the prohibitions of the Divine Mosaical Law; so also there seems to be some mention of these kind of rude *Cromlech Structures*, which we have been describing.

For it is scarce possible to annex any other idea to what the Septuagint translates *λίθον σκοπὸν*, *Saxum quod spectatur*; a Stone to be looked upon, and revered; or to be viewed, with respect, as distinct from a *Pillar*.

* See also Schaten's History of Westphalia, Vol. VII. p. 437.

† Gentleman's Magazine, Vol. LVIII. p. 318.

‡ Brown's Travels, p. 146.

§ Armstrong's History of Minorca, p. 222.

Leviticus, chap. xxvi. ver. 1.

Οὐ ποιήσετε ὑμῖν αὐτοῖς χειροποιήτα, οὐδὲ γλυπτόν, οὐδὲ Σήλην ἀναστήσετε ὑμῖν, οὐδὲ λίθον σκοπὸν θήσετε ἐν τῇ γῆ ὑμῶν, προσκυνῆσαι αὐτῷ.

If the translation of the word σκοπὸν were to mean only a mere *Stone Pillar*, standing as an idol; or as it has sometimes been thought, a *figured stone, to bow down to*; then the words of the law would be mere repetitions: as they are indeed made to appear to be, in the translation in our Bible: where we read,

Ye shall make you no idols nor graven image, neither rear you up a standing image, neither shall ye set up any image of stone in your land, to bow down unto it.

But if they be more closely translated, with a strict adherence to the meaning of each word, the expressions will *all* be found to describe very different things; which were necessary to be understood, in order to be avoided; as thus,

Ye shall not make to yourselves any idols (the work of men's hands) nor a graven figure; neither shall ye SET UP a rude Stone PILLAR; neither shall ye PLACE a Stone TO BE LOOKED UPON, in your land; to worship towards it.

For here we find a strict caution,—first, against making an *idol Statue*; or a *graven figure* on a tablet, as a representation, to bow down unto;—next, against setting up a rude stock, or *Stone Pillar*, as an idolatrous object to bow down to;—and then, against *placing* (for the distinction between the words *setting up*, and *placing*, is very remarkable), A *STONE TO BE LOOKED AT*, and bowed down to;—that is, in other words, against placing a stone, *which as a scaffold, should be viewed by multitudes*; and towards which, because of rites performed thereon, was accustomed to be *bowing*, and abominable Heathen worship.

And if the words are allowed to be in this manner translated, with a careful attention to the full extent of their meaning; there is surely no kind of *placed stone* now extant in the world, to which they can so properly be applied, as to *the old Celtic Cromlech*.

It may fairly be added also, that there seems to be an allusion to some such stone scaffold, or elevated stone, as being a place of execution, in the account that is given of Abimelech's slaughter

of his brethren.*—For it is said, “ he slew his brethren the sons “ of Jerubbaal, being threescore and ten persons, *upon one stone.*” And this expression the rather seems to allude to such a well known antient sort of *Cromlech Stone*; † because, from ver. 18. it appears evidently to have been a public execution, with the consent of all the people. And because an antient *stone Pillar* is more-over immediately mentioned as being not far distant :—for we read in (ver. 6), that after this execution, “ all the men of Shechem, “ and all the house of Millo, went and made Abimelech King, by “ *the plain of the Pillar* that was in Shechem.” Where we have, just as manifestly, an allusion to the antient ceremonial of inauguration by a Pillar, in a stone circle; perfectly consistent with what has been said concerning such usages, in the preceding pages.

We have found that there are still existing amongst us, in this island, many remains of the rude *erected Stone Pillars*, of the earliest ages; similar to those abominations of the Land of Canaan, which were derived from corrupted Patriarchal usages: and we now find also, that there are Remains of the *placed Stones, to be looked at*; or of the dire *conspicuous Scaffolds*.

And it is very remarkable, that in the old *Erse* language, as explained by a Scottish Highlander, ‡ who was skilled in that aboriginal language, *Crom* signifies bent, or crooked; and *lech* is a corruption of *clach*, a stone; and the word *Cromlech*, therefore, in

* Judges, chap. ix. ver. 5.

† Some curious persons may perhaps suspect, with me, that it was upon some such stone as this, that the Ark of the Lord was placed at *Beth-shemesh*, when it was conveyed back, out of the land of the Philistines :—and the rather, because it appears that, on some account or other, the Divine displeasure was greatly manifested against the men of *Beth-shemesh* on that occasion :—our translation says, *they had looked into the Ark*;—but that does not agree with the translation in the Septuagint :—it rather should seem, from thence, that the displeasure arose *from the Ark being seen in THAT PLACE.*—The Septuagint also leads us to conclude, that it was a great stone, *that had been placed there by men’s hands.*—It is called the *Stone of Abel*; and appears to have remained to the days of Ezra.—See 1 Samuel, chap. vii. ver. 14, 15. 18, 19.

We know the Israelites went so far, in their compliance with the horrible usages of the land, as to sacrifice their children to *Moloch* and to devils.—And we find the holy Prophet reproving them for their being *soothsayers like the Philistines*;—and for their *bowing down.*—See Isaiah, chap. ii. ver. 6. 9. Psalm cvi. ver. 36, 37.

‡ See the Gentleman’s Magazine, Vol. LXII. p. 695.

its very etymology, according to the original ideas of *that* country, still imports a stone that was to be bent towards, or bowed to, or to be looked toward out of abominable superstition; as well as a stone placed in a bent or sloping position.

The same is the meaning in *Welsh*, and *Cornish*, as derived from the Celtic language.* To which we may add, the remark of the learned Rowland,† that *Crom*, in the old Celtic language, seems to have been derived, on the confusion of tongues, from the Hebrew word *Cærem*: according to which idea, *Cærem-lech* will signify *a devoted, or sacrificing stone*; as *Cremlyn*, or *Cremlwynan*, signifies a sacrificing grove.

Take therefore the derivation of the word *Cromlech* how you will, it accords, in one shape or other, with the *Stone of Abomination* pointed at in the Mosaic Law, as distinguished from that other abomination, *the Stone Pillar*; whilst both are equally distinguished from idol images, and graven figures.‡

It will now perhaps be proper, before we conclude these observations, just to reflect a little, by what means these immense masses of stone could be reared.

Much has been said, about the impossibility of their being raised from the ground by any mechanical powers that we are acquainted with: and concerning the supposed most astonishing skill of the architects. But as, on the one hand, we may be assured they were reared in *barbarous ages*; and find, in other parts of the earth, that the most uncivilized, and unenlightened countries, and the earliest

* Borlase, p. 225.

† Rowland's *Mona*, p. 47.

‡ In these sheets I have endeavoured, in the clearest manner possible, and from the highest, and most unquestionable authorities of remote antiquity, to elucidate the true history of the Druidical Stones; of their sacred Circles; and of their abominable Altars. But I cannot forbear adding an hearty wish, that no use may ever be made of what is here brought to light, for the purpose of introducing any imitations, or representations, of such things upon the stage, by way of representing antient manners. For I must conscientiously say, that I have ever thought the representation of Pagan *sacrifices*, and of Pagan *rites*, upon the stage, to be (if not an absolute abomination in itself), at least a too near imitation of abominations. And the very reverse of an observance of that holy Command, to which *a blessing* was annexed; viz. to break their images; and pillars; and to throw down their Altars, § &c.

§ See Deuteronomy, chap. xii. ver. 2, 3.

ages, have ever been most remarkable for the moving, and making use of such ponderous masses of rock ; so it really requires no great degree of penetration, to perceive, by what means it might be done ; even without any great portion of that knowledge of mechanic powers, which we really are acquainted with.

The simple lever, with a common roller, aided by mounds of earth, and a few wedges, are quite sufficient for the purpose ; added to the exertions of a multitude of hands.

It may clearly be conceived ; that when the upright pillars of support were once placed in their proper position ; that if these were covered up by an artificial and firm mount, raised round them for a considerable extent, with a gentle and gradual ascent on one side ; that a covering stone (even larger than any that is found on any *Cromleches*), might very well be dragged, and forced up, on rollers, by united efforts of men, and oxen ; both which are actually said to have been thus made use of, by Harold, the son of Gormon, in Jutland ; when he removed a vast Stone, to be placed over his mother's grave.

And when, by such efforts, the Stone was once brought to its proper place, and situation, over the supporters ; on removing the mount of earth, by the same number of soldiers, or other people, by whom it was raised, the whole Structure would appear finished, and firm.

And as to the placing the supporters themselves ;—this might surely be done (even if they had been vastly larger than any we know of), by means of the same sort of bank of earth ; at first advanced no further than to the side of the *foundation pit*, or cavity, into which the bottom of the stone was to be let down : having a proper and steep slope formed, from its summit, down to the bottom of the pit. For the intended stone support being advanced on rollers, and pieces of timber, to the very brink and edge of the summit of the bank ; on being forced only a little further, would fall over of itself, by its own weight ; and sliding down the steep slope, would pitch, with its lower end in the pit ; in a position very near being upright ; and might soon be made, by the driving of wedges, to stand perfectly right.*

* In justice to perfect truth, I must affirm, that this plain account of the matter had offered itself to my mind, and had carried with it, to the best of my apprehensions, the

That, in the earliest ages of antiquity, mankind did actually make use of such kind of *sloping ascents, formed by factitious mounds of earth, and other materials*, for the heaving up of vast masses of Stone; seems to be pointed out to us, by those most remarkable *artificial Causeys*, near the pyramids of Egypt; of which no other account can be given, than that they were used to convey to the sloping sides of such mounts, and by that means up to the spots where they are now plac'd, the immense stones whereof those fabrics are composed. Some of which stones are 30 feet in length, and 3 or 4 feet in thickness.*

Norden informs us,† that the artificial upper plain, formed on the rock on which the pyramids are placed, and which is about four-score feet above the lower plain, has a *sloping* on the north side, and on the east side; which favoured the making divers *causeys*, that gave conveniency of transporting the materials necessary for the pyramids.—Consistently with which observation, Herodotus had informed the world, above two thousand years before; that, according to the tradition of the country (which indeed he received from the Egyptian Priests), the Egyptians were employed ten years, ‡ *in forming a way, or CAUSEY; over which they might draw the stones used in building the pyramids.* And this causey, he says, was formed of hewn stone; and was adorned with sculptures of animals.

And it is very remarkable, that there exist to this day, not only the *sloping* of the rock observed by Norden; but also remains of *two causeys* on the east side;§ and of *another causey*, on the north side of the pyramids; in a most singular situation; seeming plainly, by its direction, to have been designed for the conveyance of stones, from a canal, about two miles from the pyramids; and being of a most singular structure.—For it extends about 1000 yards in length;||

fullest conviction, long before I perused the *Mona Antiqua*. But in justice to the author of that curious work; and as a confirmation of the full conviction with which plain truth strikes various minds, attending to it; I must also acknowledge, that I found, afterwards, *Rowland* had previously acquired much the same kind of apprehensions of this matter. See *Mona Antiqua*, p. 94.

* Greaves's Pyramidographia, Vol. I. p. 101. 104.

† Norden's Travels, Vol. I. p. 71. ‡ Herodotus, ed. Wesselin. 124. p. 163.

§ The Plan of these may be seen in Norden's Travels, Vol. I. p. 71. Pl. XLIII.

|| Pococke's Travels, Vol. I. p. 42.

and is about 20 feet wide;* and is built of hewn stone; and has a turning, in its direction, in one part; and at last ends abruptly, at about the distance of a mile+ from the pyramids; opposite to the easy slope, and ascent, on that side of the rock.

This latter Causey, besides its arches, has indeed inscriptions, and other evident proofs, of having been, in its present state, partly a work of the Saracens. But those parts seem to have been reparations of breaches in a much more antient work.—And it is in a situation where it seems to have had no use, in any late ages.‡

The Temples in Upper Egypt, it is well known, were built of vast stones; and these also must have been conveyed to their place by means of a very similar kind.

And by some simple method, merely of this sort, in all probability, were those immense stones brought to their proper situation, which are found in a wall surrounding a part of the Temple of Balbec. Where there are many stones above 30 feet in length; 13 feet wide; and 10 thick.§ And some even 63, and 64 feet in length; placed near 20 feet above the ground.||

Whilst in a quarry, not much more than half a mile from thence (and out of which these stones seem to have been taken), Pococke saw still remaining, a stone ready hewn out, only the bottom was not yet separated from the rock; which stone measured 68 feet in length; and was 17 feet 8 inches wide; and 13 feet 10 inches thick.**

After the mention of these, the great Stones in the antient Palace of Persepolis, in Persia, scarce deserve notice; although they are to the full as large as most of those used in the Druidical Structures, and Cromleches, which we have been describing: being some of them 13 or 14 feet long, and 8 broad; and others 9 or 10 feet long, and 6 broad.‡‡ And several of those which stand upright, as supporters to those above, being from 8 to 15 feet in height, above the ground.‡‡

* Norden, Vol. I. p. 80. Pl. XLIV. † This might probably be, because it served only for the conveyance of stones, by means of a very long artificial sloping mount, from this ending, to the upper part of the pyramids; conveying them far above that easy sloping of the rock, which was of use only for forming their bases. ‡ Norden's Travels, Vol. I. p. 80.

§ Ruins of Balbec, p. 19.—Maundrell's Travels, p. 138. || Pococke, Vol. II. p. 112. ** Ibid. †† Voyages de le Bruyn, Tom. IV. p. 303. 305. ‡‡ Voyage de M. Chardin, Tom. II. p. 154. ed. 1735.

With regard to the Stones used in Egypt, we have even an account of the very manner in which they were hewed out of the quarries. For Pococke tells us, that after viewing the ruins of the antient Syene, he went about a mile south-east to the granite quarries; all the country to the east, and the islands, and bed of the Nile, being red granite; (the Thebaic stone mentioned by Herodotus.) These quarries, he says, are not worked in deep; but the stone is hewn out of the sides of the low hills. And he saw some columns marked out in the quarries, and shaped on two sides: and particularly a long square one, which might be designed for an obelisk. They seemed to have worked in, round the stones, with a narrow tool; and, when the stones were almost separated, there is reason to think they forced them out of their beds with large wedges; of which there are great signs in the quarries, in all parts. In some places also, he observed channels marked out, about 3 inches wide; and holes cut in those channels, at certain distances, as if for their chisels to go in; so that probably they worked down with the chisels, at the bottom, and on one side of the stone, and then forced the stone out of its bed with wedges."*

When Solomon built the house wherein he was himself to dwell; and an house for Pharaoh's daughter; they were built, we are told, of costly stones, sawed with saws, † 15 feet in length, and of 12 feet.

And when Herod rebuilt the Temple at Jerusalem, it was with stones white and strong: the length of each of which was $37\frac{1}{2}$ feet; their height, or rather their depth, 12 feet; and their breadth, 18 feet. ‡

And Josephus even tells us of some that were 45 cubits (*i. e.* $67\frac{1}{2}$ feet in length); § 6 cubits (or 9 feet), in breadth; and 5 cubits (or $7\frac{1}{2}$ feet), in height, or thickness. ||

* Pococke's Travels, Vol. I. p. 117.

+ 1 Kings, chap. vii. ver. 9, 10.

‡ Josephus's Antiquities of the Jews, Book xv. chap. xi. sect. 3.—This much elucidates the meaning of the Observation which the Disciples made to our Lord, Mark, chap. xiii. ver. 1.

§ In order that I may not exceed in any of these descriptions, I have considered *the cubit* as being merely that measure which is commonly called *the Cubit of the Ark*; (or 1 foot 6 inches.)—But if we take the cubit to be, as Whiston does, and also several other learned men, 1 foot 9 inches; the vast dimensions of the stones will be still greater.

|| De Bello Jud. lib. v. cap. 5. sect. 6.

When he built the mole at the port of Cæsarea also, Josephus tells us,* he let down stones into 20 fathom water; the greatest part of which were 50 feet in length; and 9 in depth; and 10 in breadth; and some still larger.

The stones also with which he built his three celebrated Towers, on the old walls of Jerusalem, were some of them 20 cubits (or 30 feet) in length; 10 cubits (or 15 feet) in breadth; and 5 cubits (or 7½ feet) in depth, or thickness. †

We find therefore, that in the days of Solomon; in the time of Herod, and Augustus Cæsar; and in the time of the Emperor Antoninus; larger stones than those either on any Cromlech, or at Stone Henge, were reared to various and considerable heights; without any mention, by the Historians, of any extraordinary engines, or uncommon mechanical powers, to effect the work.

And as it is impossible to suppose that the use of any very uncommon, or important machines, or devices, actually used on so many extraordinary occasions at different periods (if there had been any such machines), should have been forgotten; or that the memorial thereof should have been lost in the world; when the account of matters of so much less import, in those very days, has been carefully preserved; we may be assured, that nothing more than *common exertions* were made, on those occasions; and such as were deemed to be merely of course, and well understood by all mankind:—in short, merely the use of sloping banks of earth, or stone; and of levers; wedges; and rude timber frames.

Such knowledge might be easily apprehended by the most barbarous people: and there is every reason to believe was derived from the first Patriarchs; from whom so many various nations branched off, and were descended.

We therefore find instances of similar operations, amongst other antient and barbarous people, as well as amongst the Britons.

For *Don Antonio de Ulloa* informs us, that the Stones of the old Palaces of the Yncas of Quito, were of prodigious magnitude, ‡ and magnificence; placed one upon another, and joined in the nicest manner, but without any cement. In which palaces, it is remark-

* Josephus de Bello Jud. lib. i. cap. 21. sect. 6.

† Ibid. lib. v. cap. 4. sect. 4.

‡ Ulloa's Voyage, Vol. I. p. 499. 502.

able, that the door-ways are formed somewhat like those in Upper Egypt.

It is well known also, what vast stones have been used for building some of the very antient *Choltres*, in the East Indies.

And in like manner, we are informed, that in *Dalmatia*, the rude ancestors of the *Morlacchi*, placed vast stones over graves; of which there are above two hundred, 9 feet long; 5 feet broad; and 5 feet thick; which, says *Abbe Alberto Fortis*,* (reasoning in the usual method upon this subject), it is not possible to imagine how the old inhabitants of the country could bring from the mountain, without the help of well contrived machines.

Yet as to any extraordinary machines, we may be assured, from every circumstance of their history, they had them not.

And now; after all the prodigious masses just mentioned, the vast circular Stone of 38 feet in diameter, placed on the top of the Sepulchre of Theodorick the Goth, at *Ravenna*, ought by no means to be forgotten.† For this mass seems to have been reared, and placed in its present situation, in conformity to ideas of magnificence, which Theodorick's Gothic soldiers had derived from their own *Celtic* country; though long after the use of the *Cromlech* was forgotten.

It was reared about the year 526, not by architects deriving their skill, and powers, from the architects of Adrian, or Antoninus:—but by men (as Theodorick himself was a *Dacian*,) much more acquainted with the rude methods used by the *Morlacchi*, and *Dalmatians*, in moving their ponderous grave-stones; and, by modes which we have every reason to conclude were similar to such as were used by the antient *Minorcans*, and by the antient *Britons*, in rearing all their various superstitious Structures.

* Travels into Dalmatia, p. 234.

† There has been a fine Drawing made of this building by Clarisseau, of which a Print has been published by Mr. Sandby.

CHAPTER VI.

CONCERNING BARROWS; CAIRNS; AND KISTVAENS.

THE path we have hitherto trodden, in the investigation of aboriginal military works, and of contemporary rude works of architecture, was necessary to pass through; in order to shew the first dawnings of the efforts of mankind, exerted to procure mere safety, in a savage state;—in a state unrestrained by good laws, good government, or civilization:—in a state, where *thus* only could be found some scope for exercising the faculties, and various apprehensions of the human mind, in the midst of darkness:—where the whole soul was rendered torpid, for want of proper exertion:—and where even the little light obtained, was but as darkness; and became rather a means of plunging the mind into the most dangerous superstitions, and errors, than a source of any true consolation, or an inlet of any real good.

And this path, which we have been thus obliged to tread, has been the more difficult, and unpleasant:—because the specimens, necessary to be referred to, lie so scattered; and in such a ruined condition; and have, in general, been so imperfectly described by those who examined them at all, when they were more perfect:—and because the facts needful to be brought into one point of view, in order to give us an insight into their true history, were to be collected from the accounts of so many various countries, and from the very short details of most antient writers. Whilst, at the same time, the sad superstitious abominations that have been thus unavoidably brought to remembrance, are such as deserve everlasting oblivion; except only as far as the remembrance of them, is absolutely needful to explain, in a more full, and more satisfactory manner, the real history of the world.

To attain, however, in any degree, to such explanation, is ever worthy of our utmost pains. And to trace the progressive improve-

ments of mankind ; so as to make us duly sensible of the blessings we now enjoy, in consequence of superior light, and unmerited advantages, is a just tribute of thankfulness to the great Author of all good.

What remains to be said, with regard to this obscure subject, relating to the exertions and customs of the very first barbarous ages, will be somewhat less difficult.

For the next kind of Remains that come under consideration ;—those relating to memorials of their dead ;—the *Barrows, Cairns*,* and real *Kistvaens* ;—it will be proper to describe all together, and at the same time ; because, in truth, I hardly know of any such thing as a *Kistvaen*, properly so called, but what is connected with a *Barrow*, or *Cairn*.

And the other few remaining species of British antiquities, the *Logan*, or *Rocking Stones* ; and the *Tolmen* ; and the *Bason Stones*, are of such a kind, that I have but very little more to observe with regard to them, than has been sufficiently explained by others.

With regard to *Barrows*, and *Cairns*, in general, it ought, however, in the first place, to be observed ; that there is very great reason to believe, that almost all that we have in this island, are *British* : and that even those that were heaped up in Roman times ; and where Roman insignia have been found ; were the Sepultures, not of Romans ; but of *British Officers, or Chieftains, in Roman service*.

We do not find that the Romans ever raised Barrows over the sepulchres, or ashes, of their *Great Men*, either in Italy, or in any other part of the world ; and, therefore, there can be no proper authority for supposing them to have done so in this country.

In truth, they do not seem to have raised any Barrows at all ; except, in a very few instances, after great battles (in which case, Mounds, or Barrows, have at certain times been raised, even down to the latest periods, by all nations) ; insomuch that three Mounds, like Barrows, were raised in Scotland, after the battle of Culloden, in 1745.†

But these sort of *battle Barrows* may easily be distinguished, from

* It is well known that the *Cairn* is distinguished from the *Barrow*, merely by being a vast artificial heap of loose stones, instead of being a similar heap of earth, and sods of turf.

† See Gough's Camden, Vol. III. p. 430.

all others, by the immense number of bones they contain ; as was the case with one opened in the Isle of Thanet, containing the bones of Danes, and Saxons, slain in a battle on that coast.

The raising of Barrows over great men, according to antient primæval usage in the East, appears to have been entirely disused by the Romans. And even of others raised by them after battles, the accounts may be said, as to any certain evidence, to be nearly reduced to *two only*.

One, when Claudius Nero buried both his own soldiers, and those of the enemy, in one common grave, during the second Carthaginian war. In which instance, the words of Livy hardly amount to the description of a *Barrow*; though Dr. Borlase* concludes that one was formed on that occasion. For the words simply are, + *cæсорum hostium, et suorum corpora collata in unum sepeliri jussit*.

And the other instance was, when Cæsar Germanicus brought the first turf himself, to raise a tumulus over the remains of the unfortunate army of Varus. Concerning which, the words of the description are so elegant, that they deserve to be cited at length.

“ Igitur Romanus qui aderat exercitus, sextum post cladis annum, trium legionum ossa, nullo noscente alienas reliquias an suorum humo tegetet, omnes ut conjunctos, ut consanguineos, auctâ in hostem irâ, mœsti simul et infensi condebant. Primum extruendo tumulo cespitem Cæsar posuit, gratissimo munere in defunctos, et præsentibus doloris Socius.” †

In this instance, a Barrow, or tumulus, was certainly raised by the Romans, over the vast quantity of bones of those who had been, six years before, slain with Varus, in Germany. But as there are hardly any other instances even of such Barrows thrown up by them after battles ; so I do not know of one instance of a Barrow raised by the Romans, at any time, over any of their Generals, or Emperors.

As to the account given by Virgil, § of the Barrow raised over the ashes of Pallas ; if the description was not merely an imitation of Homer’s description of the Barrow raised over the ashes of Patroclus, it at least related to times much more antient than the founding

* Antiquities of Cornwall, p. 212.

+ Livy, lib. xxvii. sect. 42.

† Taciti Annalium lib. i. sect. 62.

§ Æneidos, lib. xi. ver. 207.

of Rome: and, after all, was a Barrow not raised by *Æneas*, and his followers (though *Æneas* might very well be supposed to have brought some such usage from Troy); but was raised by *Evander*, and the Tuscans.

We therefore may deem ourselves well warranted in the conclusion, that there were no Barrows raised, as particular monuments of their Illustrious Commanders, by the Romans, any where; and therefore unquestionably not in this country.

And as to the Saxons, and Danes;—we know, that when they became Christians, most of their Kings, and great men, were buried in Abbeys, and in the precincts of religious houses; as the bones of their greatest monarchs were preserved at *Hyde Abbey*; and are, indeed, many of them, to this hour, in chests, at Winchester. And before the conversion of those people (except merely in the case of Hengist in Yorkshire, and of Hubba in Devonshire); there is not any one instance, that has come to my knowledge, of a satisfactory traditionary record, concerning *any Barrow* belonging to the grave of any one of their Kings.

But as to the Britons; we not only know that they did actually raise *Barrows*, and *Cairns*, over their Druids, and Chieftains: but in this instance, as well as in others, relating to their fortresses, and to their superstitious rites, we find plainly they did so, in consequence of adopting a similarity of usage with those nations, and countries, in the East, from whence they originally first migrated; just as did the antient Grecian, and Syrian people.

It may, therefore, justly become a regular mode of investigating the history of these awful Remains of the fleeting transitoriness of all human greatness, however estimated, or wherever dwelling; to consider, as a prelude to our inquiries, the dismal efforts, which in the earliest periods, and in the first inhabited parts of the world were exerted, to cause *human* greatness, if possible, to survive its certain wreck.

Besides the *Barrow* under which are said to have been buried the bones and ashes of *Patroclus*, and *Achilles*; (the manner of raising which is so particularly described by Homer, and has been fully mentioned in the former part of these observations;* and which is

* P. 127.

still existing;) we find, moreover, one called that of *Hecuba*; and another, that of *Antilochus*, the son of *Nestor*; which were certainly the Barrows either of those very persons; or at least of persons who had lived in the very earliest ages, long before the days of *Alexander*. We find also the Barrow of *Halyattes*, King of *Lydia*, with many others near *Sardes*; and several others in *Greece*;—all still existing.

And if these, of such vast and high antiquity, are yet in being, in so perfect a state; preserving their original appearance, and form; it need not be a matter of surprise to us, that those of the aboriginal Britons still remain. Nor need we have recourse to conjectures without foundation, of their being raised by marauding Danes, or Saxons: neither of whom, during their plunderings, could hardly have stayed long enough in a place, to erect such mighty works, as some of those are, that have been attributed to their labours.

The Barrow said to be that of *Patroclus* and *Achilles*, with some others near adjoining, are thus described by *Dr. Chandler*; who surveyed them in their present state.

“Early in the morning we descended the slope, on which *Sigéum* stood.* After walking eight minutes we came between two *Barrows*, standing each in a vineyard, or inclosure. One was that of *Achilles* and *Patroclus*; the other, which was on our right hand, that of *Antilochus*, son of *Nestor*. This had a fragment or two of white marble on the top, which I ascended: as had also another, not far off, which, if I mistake not, was that of *Peneleus*, one of the leaders of the *Bœotians*, who was slain by *Eurypylos*. We had likewise in view the *Barrow* of *Ajax Telamon*; and at a distance from it, on the side next *Lectos*, that of *Æsytès*, mentioned in *Homer*.”

The fragments of marble found here, on the tops of the Barrows of *Antilochus*, and *Peneleus*, deserve our attention: because they plainly shew, that *here* were placed rude marble pillars, similar to that which was erected on the Barrow of *Ilus*, which has been already so particularly taken notice of.†

And because we have also reason to think there was formerly such

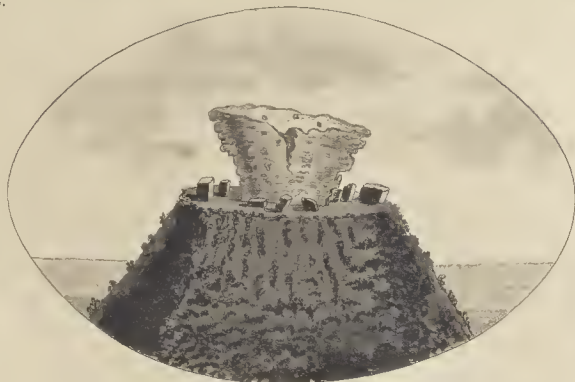
* *Travels in Asia Minor*, Vol. I. p. 42.

† P. 126.

F.1.



F.2.



F.1. Barrow near Tullagh, in Caterlogh in Ireland.
 F.2. Aggleston-Stone Barrow, on the Isle of Purbeck.



an one on the Barrow of Achilles: inasmuch as Plutarch tells us,* that Alexander poured oil on *the stone pillar* of the grave of Achilles; when he had passed the Hellespont, on his way into Persia.

The Barrow of Hecuba, Chandler says, † is still very conspicuous, near one of the castles of the Hellespont.

And the same curious and intelligent traveller observed, before the antient *Sardes*, on the opposite side of the plain, *many Barrows*, on an eminence, ‡ some of which are seen afar off.

And at the distance of five miles from thence, by the antient *Gygæa*, where was the burying place of the Lydian Kings, he saw many more *Barrows*, of various sizes; four or five of which were distinguished by their superior magnitude. All of them covered with green turf, and retaining, as far as he could examine them, their conical form, without any sinking in at top.

They are all placed on an eminence.—And on the same rising ground, near the middle, and towards *Sardes*, is most remarkably conspicuous, the vast monument, or Barrow, of Halyattes, the father of Cræsus. Where the mold, which has been washed down by time, now conceals (as Chandler very fairly supposes), the basement of stone, mentioned by Herodotus.

That great historian's very remarkable description of the mode of constructing it well deserves our notice.—And especially as one part of his account will admit of two different kinds of explanation: and as that which has never yet been adopted, may probably be the true one.

Herodotus says, § “ Lydia exhibits one work, by far the greatest of any, except the works of the Egyptians and Babylonians. For there is *there*, the Sepulchre of Halyattes, the father of Cræsus. *The foundation of which* (or *the bottom part*), *ἡ κρητις*, is of great stones; *but the rest of the Sepulchre* *χωμὸν γῆς*, a tumulus of earth.”

* In his life of Alexander, p. 283, in the Florence edition, printed A. D. 1517; where we find the Greek word used, is actually *στῆλην*. Dryden's translation therefore is very lax and indescriptive, when he says, Vol. VI. p. 25, merely that Alexander anointed the Monument of Achilles, and with his friends, as the antient custom was, ran naked about his Sepulchre, and crowned it with garlands.

† Travels in Asia Minor, Vol. I. p. 14.

‡ Ibid. Vol. I. p. 260.

§ Herodotus, ed. Wesselingii, lib. i. 93. p. 47.

Here we have, surely, in the first place, an exact description of what perfectly resembles a large British, or Irish Barrow.

We have also some intimation, in the next place, of the probable existence of a *passage*, and *Kistvaen*, or small room, *under the foundation of great stones*; designed for the reception of the bones and ashes; and formed of large rude stones, as in some of our Barrows; and both covered, and surrounded with other large stones. Over which there was then, a vast tumulus, or mount of earth, heaped up very high.

And the historian, after this, goes on, and says, (as has hitherto been apprehended,) “that the artificers, the labourers, and the girls who were prostituted for hire, constructed it. And even to my days, are remaining five *termini*,” on the top of the Sepulchre; having letters inscribed, recording what each had performed. And on a measurement it appeared, that the work of the girls was the most considerable.—The circuit, or circumference, of this Sepulchre is six stadia, and two plethra (that is, a little more than three quarters of a mile); and the breadth is thirteen plethra.”

But in translating the whole in this manner, there seems to be no small difficulty as to the word *ὄροι*; which is translated *termini*, or *rude boundary stones*; and also as to the words *γράμματα ἐνεκεκόλαπτο*; which are translated *letters were inscribed*. For, indeed, it is only by a particular mode of *accenting*,+ that *ὄρος* can ever be put for *ὄρος terminus*, or *finis*—a *boundary*, or *limit*. And much more properly *ὄρος* may mean *alveus*, or *fossa*, a *ditch*, or *artificial trench*; whilst, at the same time, the word *ἐνεκεκόλαπτο*, in reality rather implies, that letters, or marks, were impressed, *by being stampd*, or *beaten in*, than by being *inscribed*, or *cut*. The expression, therefore, actually used by Herodotus, does not, in reality, at all agree with the idea of an inscription being cut on *boundary stones*; or on any *stone monuments*: but exactly agrees with that of *rude characters*, or *marks*, being stampd, or beaten into the side of a dry ditch (perhaps somewhat in the manner that those old memorials, the figures of the

* Littlebury translates the words, *five monuments*; but Mr. Beloe, whose translation of Herodotus is by far the best of any we have, fairly translates the words only *five termini*; leaving the precise meaning, as to what material they consisted of, uncertain.

+ H. Stephens, Tom. II. p. 1464.

white horse, and of the *white-leaf cross*, are formed on the sides of certain chalk hills, in our own country.*

Herodotus then expressly says, it appeared, *by measuring*, that the work of the girls was the greatest. And we may observe it certainly would be so, in every respect, if their ditch was, as it should seem to have been, the outermost of five concentric ones, formed on the summit of this vast Barrow.

I should therefore be greatly inclined to translate the words of Herodotus as follows; taking them as they might appear before the invention of *accents*.

Του η κρητις μεν εστι λιθων μεγαλων, το δε αλλο σιμα, χωμα γης. εξεργασαντο δε μιν οι αγοραιοι ανθρωποι, και οι χειρωνακτες, και αι ενεργαζομεναι παιδισκη. ουροι δε πεντε εοντες, επι και ες εμε ησαν επι του σιματος ανω και σφι γραμματα ενεκεκολαπτο, τα εκαστοι εξεργασαντο και εφαινετο μετρομενον το των παιδισκων εργον εον μεγιστον.

“ The bottom part of it was a mass of great stones; but the rest
“ of the Sepulchre a tumulus of earth.—The men in civil life+ (or
“ who exercised public offices), and the craftsmen (or mechanics),
“ and the girls who were prostitutes, ‡ reared this Sepulchre, each
“ class by themselves.—And there were yet existing, even to my
“ days, five ditches (or artificial trenches), upon the Sepulchre on
“ the upper part; on which were stamp (or impressed) letters (or
“ characters), shewing what each set had wrought. And, *on measur-*
“ *ing*, it appeared that the work of the girls was the greatest.”

According to this translation, we find, this Sepulchre was (as Chandler indeed found it to be) a great Barrow, or artificial hill.

And, according to this translation of the whole, we are further informed, that it was raised over certain great Stones, which immediately covered the bones and ashes; whilst, at the top, were five

* The first in Berkshire; the latter in Buckinghamshire.—An account of both of which may be seen in Gough's Camden, Vol. I. p. 155, and 319.

+ *Αγοραιοι ανθρωποι*, surely means, properly, *men who frequented the forum*, FORENSES, *men concerned in public business*; much rather than *labourers*, or men of *mean occupations*. See H. Stephens, Tom. I. p. 27.

‡ Herodotus informs us a few lines further, that there was an horrible custom, among the *Lydians*, for all the young women to prostitute themselves, during one part of their lives; and by that means to procure their marriage portion.

great works, like ditches, or artificial trenches; somewhat in the manner of those of an antient *hill fortress*, surrounding the area on the summit. On the slopes of which ditches were rudely stamp'd, in *large characters, certain marks, or letters*, expressing how much of the work each of the several classes of people had performed.

And this account surely agrees much better with the rudeness of those early ages, than the idea of any regular *pillars, or carved stones*, with inscriptions engrav'd upon them. Which *pillars*, if such had really been what he intended to describe, the historian would rather have mentioned, by the proper word *Σηλαι*. By which the rude Pillars, on the Barrows of Ilus, and of Patroclus, and Achilles, are actually mentioned.

To proceed then with the consideration of such works of the primæval ages, in parts of the earth first inhabited, as were similar to our British Barrows.

Chandler saw in Greece, another Barrow, on the shore near *Ægina*;* which seems to have been the same with that seen by Pausanias in Adrian's time, when it had still remaining, upon its summit, a *rough Stone*.

There is also still remaining a most remarkable Barrow, on the plain of Marathon; which was in like manner taken notice of by Pausanias; and seems to have been that under which *the Athenians* were buried, after the celebrated battle with the Persians.—It is,† though so many centuries have elapsed since the time of Pausanias, a mount that still towers above the level of the plain.‡ It is of light fine earth, and has a bush or two growing on it. And from the summit is a most pleasant view of the country.

There are also some other Barrows in the adjacent region, near a part called *Brauron*, which may probably be some of those others mentioned by Pausanias, as belonging to other persons slain in this famous battle.

And it ought not to be forgotten, that when Laius had been slain at Phocis, in a sudden tumult,§ by his son *Ædipus*, stones were heaped over him, and those slain with him; which must have

* Travels in Greece, Vol. II. p. 14, 15.

† Ibid. Vol. II. p. 165, 166.

‡ The well known, ingenious Mr. Reveley, made a very fine drawing of this Barrow upon the spot.

§ Diodorus, lib. iv. p. 185. Par. ed. 308. Westeni.

formed a kind of Cairn, or Stone Barrow, and seems to have existed in the days of Pausanias.*

Neither should it be forgotten, that when Tydeus, the father of Diomed, was slain, in the Theban war, he was buried by *heaping*, or *pouring out*, earth upon him; that is, by means of forming a Barrow, or tumulus over him.+

Τυδέως, ὃν Θήβησι χυλὴ κατα γαῖα κάλυψε.

So, the Sepulchre of Lycus, near Sicyone, was a Barrow of earth.‡

And even so late as in the time of Alexander, his friend Hephestion (like Patroclus the friend of Achilles), was buried under a Barrow.—Justin says, § that Alexander raised a *tumulus* over him, at the expence of twelve thousand talents. And from the manner in which Quintus Curtius speaks of it, || we may clearly perceive that such a kind of interment was then become, even in those days, which we now deem so early, somewhat unusual.

So also, if Xenophon's History of Cyrus is to be relied on as containing real facts; when Abradates and Panthea were honoured by that conqueror with distinguished marks of respect; on the interment of that unhappy pair (Panthea having killed herself, that she might be interred in the same grave with her husband), a great tumulus of earth was raised over them; Cyrus having before promised Panthea, *that such a monument should be reared by many hands, and that such victims should be sacrificed, as were becoming the memory of a brave man.***

In the most antient, Eastern parts of the world, first inhabited, we find accounts of the observance of the same aboriginal custom.

For Ives informs us, †† that not far from the Courdistan and Sanjack mountains, between Mesopotamia and Assyria, is a small mount, containing the tomb (or Sepulchre) of Geraza, an antient Sage. And in another plain, between the *Courdistan*, and *Sanjack* mountains, are eight or ten mounts, which in shape resemble some others near *Kircoote*, and *Arvele*, (supposed to be the antient *Arbela*.)

* Pausanias in Phocicis, cap. v. p. 508. + Iliad. lib. xiv. ver. 114. Nothing surely can be more lax, or erroneous, than Pope's translation of this line:—viz. that Tydeus, *Lies whelmed in ruins of the Theban wall.*—Iliad, book xiv. ver. 128. ‡ Pausanias, p. 126. § Justin, lib. xii. cap. 12. || Quintus Curtius, lib. x. cap. 4.

** Cyropædia, lib. vii. p. 507. Hutch. ed. †† Ives's Travels, p. 335, 316.

The custom seems also to have been carried Eastward, in the earliest ages, even as far as China: and (as all customs of their ancestors are there revered) to have been preserved, in a degree, even to this day: for we are told, in the accounts which we have of that country,* that mountains and solitary places far from towns, are chosen for the seat of the tombs and sepulchres of the great: and *if a tomb is erected in a valley, or plain, a vast heap of earth is accumulated over it, to the height of a mount.* Whilst the tomb itself is an arched vault, about the size of an ordinary cottage, so covered with plaister that no moisture can penetrate.

Nor ought the pyramids of Egypt to be forgotten on this occasion. For there can hardly remain a doubt in the minds of those who fairly reflect upon the whole of their construction, and upon their situation, and numbers, but that these pyramids were merely one degree more of a little refined improvement beyond the more aboriginal Barrows of that country, that had existed in the very first rude ages. And that they were substituted in the room of such, in consequence of the introduction of vast power, and of its concomitant magnificence bursting forth here, sooner than in other regions of the world.

Dr. Shaw † indeed fancied, that the pyramids of *Gize* were designed for Temples; and for the exercise of superstitious Pagan rites. And there might perhaps have been some foundation for such an idea, if there had been only one or two, or a few pyramids in different places; and those *open*, and by any means accessible. But as we find not only the three great pyramids at *Gize*, but also a fourth not far distant, all entirely closed, except the one which has been forced open; and find also remains of many small ones near, that have been destroyed;—and find others so numerous at *Sakarra*, or *Saccara*, and *Dagjour*;—there can remain no doubt, but that they were intended for Sepulchres.

And indeed we may be well assured, that they were formerly more numerous still. For if those two vast pyramids, which were seen by *Herodotus* standing in the midst of the lake of *Meris*; and

* This agrees with the accounts of *Du Halde*, and *Nieuhof*, and is particularly mentioned in a *Voyage to the East Indies* in 1747. 8vo. p. 191.

† *Shaw's Travel*, p. 370. 4to.

which were 200 cubits (that is, 50 fathom, or 300 feet) above the surface of the water,* be now so utterly destroyed, that nothing is to be seen of them at present, but two banks like islands; † how much rather may many other smaller ones have been demolished, as well as those ‡ which were near the great ones that still remain at Gize, and at Sakarra.

The pyramids of *Saccara*, we have every reason to believe, were of higher antiquity than those of Gize. And they seem manifestly to have been the first rude improvement of the antient Barrow, formed by rearing such vast pyramidal pilcs, either of stone, or of brick; instead of heaping up conical mounds of earth.

Indeed Poccocke says, § some of them look more like hillocks cased with stone, than like pyramids.

And Herodotus expressly tells us of a vast pyramid, formed by heaping up bricks, made of clayey mud, and straw; and piled up in this manner. And even describes the process observed in its construction, on the authority of an antient inscription. A process which cannot avoid impressing upon our minds an idea of the manner in which the antient Egyptians improved the peculiar soil of their country; for the purpose not only of rearing these sepulchral trophies of magnificence; but for constructing the walls of many of their cities; and also those artificial mounds, on which several of their cities and towns themselves were placed. ||

The process was; that striking the bottom of the lake *Maris*, with long poles, they collected the mire and mud that adhered to them; and of that formed the bricks.**

The great false pyramid of Meduun, as it is called, made of bricks, and standing amongst those of Dagjour, and Sakarra, seems to have been constructed of just such materials. And is described, both by Norden †† and Poccocke. ‡‡

And Shaw §§ mentions others that had been made of bricks: and

* Herodotus, lib. ii. 149. p. 177. ed. Wesselingii.

† Poccocke's Travels, Vol. I. p. 65.

‡ Ibid. Vol. I. p. 41.

§ Ibid. Vol. I. p. 50.

|| Ibid. Vol. I. p. 21, 22, 23.

** Herodotus, lib. ii. 136. p. 170. ed. Wesselingii.

†† See Norden, Vol. II. Pl. LXVI, LXVII. p. 81. 84; and Vol. II. p. 10.

‡‡ Poccocke, Vol. I. p. 53. Pl. XIX.

§§ Shaw's Travels, p. 136. 4to. ed.

says, the straw which keeps these bricks together, seems to be a proof that they were never *burnt*, or made in kilns.

Whilst, therefore, we make this observation ; it cannot escape the attention of the curious, that we have perhaps here, somewhat of an elucidation of the manner in which some part of the revenue of Egypt was originally produced.—The payment of a certain tale of such bricks, from the mud of the overflowings of the Nile, being most probably, as regular an impost, as the payment of a certain portion of corn, from the produce of the land. A circumstance which greatly illustrates the whole of the very interesting piece of sacred history, that we have in the book of Exodus concerning the Israelites ; and concerning the unjust exaction of bricks : such, being perhaps an unreasonable, oppressive, increase of what had once been indeed a part of revenue ; but was now so exacted, from the Israelites, as to reduce them to be mere hard labourers, and bondmen.

Towards the North, we find most curious Remains of the observance of this custom, of raising vast mounds, or Barrows, over their dead, from time immemorial.

Strahlenberg tells us,* that vast numbers of *Tumuli*, called by the Russians *Bogri*, are found in Siberia, and in the deserts which border on that country southwards. And that in these tombs are found many plates, and ornaments, and trinkets of gold.

These graves, or Sepulchres, he says, are of different structures. Some are only raised up of earth as high as houses, and placed so near together, and in such numbers, in the spacious plains, that, at a distance, they appear like a ridge of hills. Others are *set round, with rough hewn stones* (of which Strahlenberg has given us some representations, that much resemble some of our rude Druidical Stones, erected upon, or near to Barrows).

Others are entirely built, or formed, of stones (and therefore were obviously what we now call *Cairns*). These Barrows are in the antient maps of Tartary, called the Pyramidal Sepulchres of the Tartarian Kings. And their vast antiquity appears, from the construction of the weapons found in them, especially the swords ; which were not forged, but cast, of copper, and shaped like our

* Strahlenberg's Description of the North and Eastern parts of Europe and Asia, p. 325. 330. 364.

bayonets: and still more from a very curious circumstance, mentioned by a Swede, who was long in captivity in the city of *Jenisei*; that the ambassadors of the *Chinese Tartars*, in the last century, in their return home, passing through that city, desired leave of the then Governor, to visit (these tombs, as) the graves of *their* ancestors; but it was refused them (says Strahlenberg),* not improbably, because they would have found almost all of them opened, and rifled.†

In short, there is no tradition concerning the time of their construction; and they seem to have been the very Sepulchres, which were deemed antient, even in the time of Darius; when on inquiring of the Scythians (the inhabitants of these very regions), why they so continually retreated before him from the part of the country wherever he was?—they answered, ‡ that they lost nothing by giving way, having neither towns, nor cultivated lands; *but that they had Sepulchres of their fathers, which, if he should find, and attempt to disturb THEM, he would then know whether they could fight or not.*

These Sepulchres, and the treasures discovered in these latter days to have been concealed in them, are also particularly described by Bell, § in his Travels; who says, that in a large, dry, and open plain, about eight or ten days journey from Tomskey, are found many tombs, and burying places of antient heroes. These tombs are easily distinguished by the mounds of earth and stones raised upon them.

In short, it appears from all the accounts given to us, that they most exactly resemble the kind of Sepulchres described by Herodotus, as being constructed on the interment of the Scythian Kings; many of which were antient even in his days, and therefore must have been aboriginal indeed.

Herodotus tells us || (if we fairly extract the substance of his account), that they placed the body in a Sepulchre, or a sort of bed; fixing spears both on this side and on that side; and that they

* P. 366.

† Before the Czars of Russia were acquainted with the riches of these tombs, the Governors of the cities of *Tara*, *Tomskoi*, and of some others, used to give leave to the inhabitants of those cities to go in voluntary caravans to plunder the tombs, on condition of sharing in the spoil. Strahlenberg, p. 365.

‡ Herodotus, lib. iv. 127. p. 336. ed. Wesselingii.

§ Journey to Peking,

Vol. I. p. 209.

|| Herodotus, lib. iv. 71. p. 313. ed. Wesselingii.

formed a roof, or covering over it; and in the ample space around, they placed one of his concubines strangled, and also, some of his officers, and some of his horses, and also vessels of gold (because silver and brass are not used amongst them); and then with great care and diligence they heaped up earth upon the whole; and raised a mound, or tumulus, as high as they could.

With this description, the appearance, both within and without, of one of the largest of these Tumuli, or Barrows, that was opened by order of the Russian court, agreed as nearly as possible.

We have an exact relation of what was found, on that occasion, in the *Archaeologia*.*

The Barrow, like many of ours in this country, had the appearance of a great conical artificial mount, or hill. And after removing a part of this, that formed a very deep covering of earth and stones, the workmen came to three vaults (as they are called), which were manifestly, as appears from their form and figure, mere *Kistvaens*, or small square cells, or chambers, with flat coverings, constructed of rude rough stones. In one, which was placed in the centre, and was the largest of the three, were deposited the remains of the prince; distinguished easily, by the sword, spear, bow, quiver, and arrows, which lay beside the body.

In the cell, or vault beyond him, at his feet, were the bones of his horse; with his bridle, saddle, and stirrups.

And in a cell, or vault of smaller dimensions than the prince's; and placed at his head; lay the body of the princess, or concubine, distinguished by her female ornaments.—She was placed in a reclining posture against the wall, with a gold chain of many links, set with rubies, round her neck, and gold bracelets round her arms. The head, breast, and arms, in other respects appeared to have been left naked; but the body was covered with a rich robe, only without any border of gold or jewels. It was laid upon a sheet of fine gold, and covered over with another of the same precious metal.

And, in like manner, the body of the prince lay in a reclining posture, on a sheet of pure gold, extending from head to foot; and

* Vol. II. p. 224. Pl. XIV.—The account is given in a letter from Petersburg, sent to Mr. Peter Collinson; of which I have here, shortly, extracted the substance.

had another sheet of gold, of the like dimensions, spread over him. He was wrapt in a rich mantle, bordered with gold, and studded with rubies and emeralds. But there was no ornament upon his head, neck, breast, or arms.

The four sheets of gold weighed forty pounds. And the robes of both bodies looked fair, and complete; but upon touching crumbled into dust.

In a subsequent Memoir, in the *Archæologia*, a conclusion is drawn, that this Sepulchre was not older than the year 1294, and was subsequent to the time of Genghiz-khan. But as that conclusion is founded, merely upon the appearance of some letters, cut upon the pedestal of the figure of a tiger in silver; and upon the imagination that the conquests of Genghiz-khan, who had the plunder of a great part of the East, would best account for the riches found in this Sepulchre; it surely is not easily to be assented to. For it appears that the silver tiger was not found in this Barrow; but in another, which had no immediate connection with it; and therefore, from the letters on the pedestal of that silver tiger, no conclusion can fairly be formed on this occasion. And as to the plates of gold, and other rich ornaments, discovered in this great Barrow; surely what is expressly asserted by Herodotus, will better account for the whole, than a supposition of the gold being apparent remains of the plunder of Genghiz-khan.*

Herodotus positively affirms, that vessels of gold were interred with the bodies of the Scythian Kings, and that they actually had, even in those antient days, such plenty of gold in Scythia, that silver and other metals were of no account. To which I cannot but add, that a very curious fact lately brought to light, somewhat explains this matter. And shews at least whence they might have obtained some of their gold: in regions, to which it was very possible for them to have access.—Concerning this fact I received information from that most inquisitive, intelligent, and accurate geographer, Major Rennell; who obtained the account from an eye witness, that had lately traversed those regions. And this fact is, that in a tract of country, running from the parts of Mount Taurus,

* Herodotus, lib. iv. 71. p. 113. ed. Wesselingii.

near where the Euphrates begins to be navigable, northwards through Tartary, into Siberia, there are still most astonishing remains of mines, which contain gold, as well as silver, and other metals; but which are not now worked; because all the timber in the neighbouring countries has been utterly exhausted. Consistently also with all these accounts, we are told by M. de Stehlin,* that amongst the Mongul Tartars there were hords, called the *Iolotaja hords*, or *hords of gold*; from the abundance of that metal, and other riches found amongst them.

Hence, therefore, we may be convinced, that great treasures of gold and silver, might exist in Tartary, in the most antient times;† and long before the conquests of Genghiz-khan. And as, (consistently with their reply to Darius,) the Scythians had neither towns, nor cultivated land, nor indeed any commerce; those riches must necessarily have been confined to, and appeared in the ornaments of their persons, and tents, and accoutrements; and therefore would often be buried in their Sepulchres; and must ever, in consequence of all these circumstances, have appeared more vast than it really was.

Of these very antient Scythian Barrows, concerning which we have been speaking, there are some that are 30 Russian toises in circumference; some 50; and some 100; and even so large as 500. Their altitudes also are from 5 toises, to 20; and even to 30 toises,‡ or 210 feet: each Russian toise measuring 7 English feet. So that they are evidently just as various in their magnitudes as our British Barrows. And the matters found in those of small dimensions, are *there*, as *here*, in general merely rotten, or burnt bones, with arrow, and spear heads, and other pieces of weapons.

The vast antiquity of these kind of Barrows, in the primitive parts

* Counsellor of state, and secretary to the academy of sciences at Petersburg, in one of his Memoirs.

† It is possible, that in future ages, when the navigation of the Euphrates shall no longer be impeded by the severe band of Turkish government, and by want of improvement; that these mines, either by the exportation of their contents, or the importation of fuel, may still become a source of prodigious, and useful commerce.

‡ See a very curious account by Governor Pownall in the *Archaeologia*, from particulars communicated to him by Mons. de Stehlin, Vol. II. p. 262.

of the earth, appears from one having been made use of as an *old* landmark, even in the time of Homer; which that father of poets calls the Tomb, or Sepulchre of Æpytus,* and describes as being situated on mount Cyllene in Arcadia. Which Barrow, Pausanias, who saw it many ages afterwards, says,† is a tumulus of earth, of no great size, surrounded at the foot, or base, with a circle of stones.

It appears also, from what Diodorus Siculus relates,‡ on the authority of Ctesias, concerning the supposed Sepulchre of *Ninus*, raised by *Semiramis*; which was a vast tumulus of earth, 9 stadia in height, and 10 in breadth; according to his account. And although these dimensions, like those given by Herodotus concerning the Barrow of Halyattes, seem to be mentioned in an exaggerated manner; unless there has been some mistake in the figures in the copies, or unless the stadium was a smaller measure than is generally apprehended; yet, without doubt, we have here an instance of a vast Barrow being formed, in the very first ages concerning which history pretends to preserve any records.

And indeed, as on other occasions, we find constantly in the Holy Scriptures, some traces, in what is related concerning the Israelites, of such primæval customs as were derived from the first ancestors of mankind, and were from thence adopted in common by the most antient and aboriginal inhabitants in various parts of the earth; so here also; in the construction of *Cairns*, and *great Barrows*; although the Israelites themselves were, by their law, directed most carefully to avoid the adopting, in their own manners, the customs of the Gentile nations, in superstitious ceremonials; yet we may perceive (from what was practised on certain occasions, where the decease of some particular persons was to be in an especial manner remembered), that they were not at all unacquainted with this usage.

For, when the King of Ai was slain, his carcass was cast (or placed on the ground), at the entering of the gate of the city, (or near unto the gate of the city,) and thereon was raised a *great heap of stones*.§

* Iliad. lib. ii. ver. 604.

† Lib. viii. cap. 16.

‡ Lib. ii. p. 67, of the Paris ed.; and p. 120. Westerii.

§ Joshua, chap. viii. ver. 29.

So, when the five Kings who warred against Gibeon were taken, after they had fled and hid themselves in a cave at *Makkedah*;* (which, from the whole tenour of the account, seems plainly to have been of the same kind with that wherein Josephus, so many ages afterwards, endeavoured to conceal himself from the forces of Vespasian; and of the same kind with those, in still later ages, formed by the Britons near Crayford, which are fully described in the former part of these sheets);+ when these five Kings had been brought forth out of this cave, or pit, and had been hanged, by the command of Joshua, their bodies were afterwards cast into the same cave, and great stones were laid upon the cave's mouth (*i. e.* on the mouth of the narrow pit leading down to it), which remained for ages.

So again, in the instance, of a most tremendous punishment, inflicted upon Achan, for setting an example of most wilful disobedience to a positive command of Almighty God, on the very first entrance of the people of Israel into the Promised Land; we are told, they burned him, and his sons, and his daughters, and his oxen, and his asses, and his sheep, with fire, after they had stoned them with stones. And they raised over him a great heap of stones.‡

And when Absalom was slain, many ages after; they took him, and cast him into a great pit in the wood,§ and laid a very great heap of stones upon him. There must, therefore, have remained in that spot, an exceeding great Cairn; which being in time covered with soil and grass, would have just the appearance of one of our large Barrows.

The usage of rearing these kind of Sepulchres, being then of such exceeding high antiquity, it is no wonder that we find it to have been practised by the first settlers, every where; who having branched off from the most antient nations, had been led by various events to take up their residence in very remote parts of the earth.

Accordingly, even in America we find traces of this practice.

For a circumstance mentioned by Colden, concerning some of the interments of the Indians of the five nations, bears a very strong resemblance to what we have been describing as to the antient customs of the aboriginal Scythians.

* Joshua, chap. x. ver. 16. 18. 22, 23, 24, 27.

+ See p. 47.

‡ Joshua, chap. vii. ver. 24, 25, 26.

§ 2 Samuel, chap. 18. ver. 17.

They make a large round hole, he says,* in which the body can be placed upright, or upon its haunches, which, after the corpse is placed therein, is covered with timber, to support the earth which they lay over it; and thereby they keep the body free from being pressed. *They then raise the earth, in a round hill, over it.* They always dress the corpse in all its finery, and put wampum, and other things, into the grave with it.

So, in Frezier's Voyage,† we have an account of the tombs of the Indians in Peru, before the invasion of the Spaniards, that bears a distant resemblance both to the customs we have been describing, and to the conversion of plain Barrows, or Tumuli, into pyramids; which change was so much more completely effected by the Egyptians.

In travelling through the country, he says, there are still to be seen many tombs, even of those before the conquest by the Spaniards. They are above the ground, built with *unburnt bricks*, and round, 5 or 6 feet in diameter;‡ and 12 or 14 in height; arched like the top of an oven; in which the dead were placed sitting, and were then walled up.

And as these pyramidal Sepulchres, in *Peru*, are formed of unburnt bricks; (as indeed are very many of the pyramids near Saccara in Egypt, §) so, even in those same Deserts of Siberia, and Tartary, where the great Barrows we have been describing are met with, there are also found others, entirely built up of stone; ||

* History of the Five Indian Nations of Canada, p. 16.

† Frezier's Voyage to the South Sea, p. 178.

‡ Whoever well considers these dimensions, will perceive that Frezier must probably have meant to speak only of the structure of the cavity, or vault within.

§ Norden's Travels, Vol. I. p. 81.—Pococke's Travels, Vol. I. p. 49, 53.—The bricks of which these pyramids were built, formed of chopped straw, and dried and hardened in the sun, were some $13\frac{1}{2}$ feet long; $6\frac{1}{2}$ inches broad; and 4 inches thick. And others 15 inches long; and 7 inches broad; and $4\frac{3}{4}$ inches thick. They were plainly, therefore, of no determinate measure; and remind us very much of the bricks said to be made by the children of Israel, during their bondage, and oppression in Egypt.**

I must add, that Dampier, in his Travels, Vol. I. p. 139, informs us, that some of the Indians in America, make brick for their houses, of earth and straw kneaded together, and dried in the sun.

And that Le Bruyn, in his Travels, Vol. IV. p. 61. mentions buildings in Persia, of bricks made with clay and chopped straw, and dried by the sun. || Strahlenberg, p. 365

** Exodus, chap. i. ver. 14.—chap. v. ver. 7.

which are, therefore, in appearance, a sort of rude rough pyramids; and are in the antient maps of Tartary, with still more propriety than the others, called *the Pyramidal Sepulchres of the Tartarian Kings*.

And to return nearer home; most surely, very similar to these, are the great stone Cairns mentioned by Armstrong, as still existing in the island of *Minorca*; where we have every reason to believe *the Celtes*, descended from the same common ancestors with the aboriginal Britons, existed in the earliest ages; and where so many remains are found, similar to the Druidical Stones that were reared in this country.

Diodorus Siculus, speaking of the *Balleares*, says,* “that pressing together the limbs of a dead body with boards, † they cast it into a hollowed receptacle (or cavity), and place over it a large heap of stones.” And accordingly we actually find in *Minorca*, many great Cairns, or conical heaps of great rough stones, piled up even to the height of fourscore or 90 feet.‡ And on one side of these, is often found, at the base, the entrance of a cavity, or narrow gallery, which seems to have led originally to the rude vault, or receptacle for the dead, in the centre.

The same sort of *Celtic* people also, derived from the same common ancestors, carried the same customs into the northern parts of Europe; into Denmark, and Sweden; whence it comes to pass, that there is so great a similarity between the great Barrows, and the Stone Circles, of those countries, and those in Britain, that some persons have too hastily been led to conclude, that such works in this country were, in general, the works of Danish invaders.

Torfæus, § and Stephanus, inform us, that *Odin* introduced into those northern regions the custom of burning the dead, and of putting the most valuable things of the deceased into the grave with

* Lib. v. 207. p. 344. ed. Wesselingii. † The expressions made use of in the Greek are very remarkable, and may be allowed rather to convey the idea of a sort of coffin of wood, being deposited in a Kistvaen, or stone chest, or vault; than that of the body being pounded, or beaten with clubs, and then crammed into an urn.—Συγκάψαντες ξύλοις τὰ μέλη τῆ σώματος, εἰς ἀγλεῖον ἐμβάλλουσι, καὶ λίθους βασιλεῖς ἐπιτίθειασιν.

‡ Armstrong's History of Minorca, p. 215. § Ser. Dynast. Reg. Dan. cap. vi. p. 130. 144. 8vo.

their ashes; and (this grave, with the ashes, and urn, being placed in the middle of a circular area), they covered it up with great stones; and heaped stones, and earth, and turf, over it, in form of a mount, or hill.

The same is said also to have been the form and construction of the antient *Cimbrian Sepulchres*.*

There are numbers of these kind of Barrows in Denmark,† and Sweden; in Russia; and in Poland. And still more particularly, we are told, by *Wormius*, that two brothers, petty princes in Naumdhall, employed themselves for successive years, with very expensive labour, in erecting one of these Sepulchral Barrows. Which piece of history alone plainly shews, how impossible it was for Danish invaders in Britain, and Ireland, to raise those vast Sepulchral mounts that have been so hastily attributed to them.

In Sweden, we are told,‡ there are three vast Barrows, near *old Upsal*, which still retain the name of *the King's Cairns*, or *Cairns*—*Kongs Hoarn*.—One of these is 75 steppings high. There are also, in that neighbourhood, very many others of smaller dimensions.

In the road through Lower Saxony also, Brown says, § he could not but take notice of many *Barrows*, or *Mounts of earth*; the burial monuments of great and famous men; such as are to be often observed in open countries in England.

Having, by this great variety of instances, shewn how plainly this custom of heaping up vast Barrows of stones, and earth, over the illustrious dead, may be traced from the very earliest ages, and from the inhabitants of those countries, which were first cultivated on the face of the earth; and how evidently it has been preserved in so many other countries, by the *first* settlers, most immediately derived from those common ancestors; and especially when they have been secluded from much intercourse with the rest of the world; and how truly it has been preserved by such aboriginal people only; we may now safely venture to reason more closely; and to draw some satisfactory conclusions, concerning the *Cairns*, and *Barrows*, in this island, and also in Ireland:—and on examining the

* Remarks on the Cimbrian Antiquities in Holstein.—Hamburg, 1728. p. 154.

† Monumenta Dan. lib. i. cap. 6.

‡ Monumenta Sueo-Gothica,

lib. i. p. 215. 217.

§ Brown's Travels through Germany, p. 146. 4to.

plain descriptions of a few, we shall perceive, that they must have been the works of the Britons here, and, in all probability, of the very first inhabitants of Ireland, in that island; and prior to the invasion of the Danes in either; though, indeed, they are so similar to the works of that people, in their own northern regions.

There is one in Ireland, which has been opened by accident, in such a part as to shew its exact interior structure: and has been repeatedly, and carefully, examined: and which so completely corresponds with the accounts we have of the Asiatic Barrows of Patroclus, and of Halyattes, and with the accounts of the Tartarian Barrows of the Scythian Kings, that in reading the accounts of the one, we even seem to be reading an account of the other.

It has been examined, and described very particularly, by Dr. Molineux,* with the assistance of a gentleman of the same name;—by Mr. Wright,† the author of *the Louthiana*;—and by Governor Pownall:‡—and as the account given by the Governor is far the fullest, and most accurate of any, I shall beg leave to extract principally from thence, and very briefly, such particulars, as it is on this occasion needful to mention.

This prodigious Barrow is situated in the county of Meath, within four miles of Drogheda. Its altitude is about 70 feet; and its diameter about 320; and it covers about two acres of ground. It is formed, not of earth, but of pebble, or coggle stones, of a kind which shew they must have been brought from the mouth of the Boyne, at the distance of twelve or fourteen miles; a circumstance that is alone a proof how vast a multitude of people, and how great a space of time, must have been employed to rear this astonishing heap; and that it could not be the work of mere invaders, or of any people but such as had uninterrupted possession. It was encircled formerly, at the base, with a number of enormous unhewn stones set upright, (nine or ten of which were remaining very lately;) and there was one also of considerable bulk erected on the summit: just as we may recollect was the case, on the Sepulchre of

* See the Philosophical Transactions, No. 335, and 336; and Boate's Natural History of Ireland, p. 202, 206, &c.; and Ware's History of Ireland, p. 147. In all of which are plans and representations of the whole.

† Louthiana, book i. p. 15.

‡ Archæologia, Vol. II. p. 236.

Ilus; and of others that we have mentioned to have been reared in the most antient times in Asia.

At the distance of forty feet, within the utmost limit of the base, was discovered, by accident, the mouth of a long narrow gallery, between 3 and 4 feet in width, and height; formed of rough large flag stones, some set on end, on each side, and others laid across to cover the top: one of which latter is no less than 13 feet long, and 5 broad; and another 11 feet long, and $4\frac{1}{2}$ wide. This gallery is about $61\frac{1}{2}$ feet in length; leading to a remarkable repository, or vault, at the end; where were found, when the cave was first opened, the bones of two bodies lying on the floor. At the distance of 13 feet from the entrance, the gallery is narrowed, so as to be only 2 feet, 2 inches wide, and to form a most difficult pass, (which cannot but remind a curious observer of the difficult pass at the end of the first gallery, in the great pyramid of Egypt.) After this, it becomes high enough to stand upright; and increasing in height, from 6 to 9 feet, conducts the visitor with ease to the vault, which is near 20 feet high.

This dome is nearly of a conical form; and cannot but remind us of what has been said concerning the repositories in the Indian Sepulchres.

It is of a very remarkable structure. The plan of it is a sort of rude irregular octagon, about 9 feet in diameter; with two wings or recesses, forming receptacles, or *Kistvaens*, to the east and west; and a third to the north; and having the entrance from the gallery on the south: which four open spaces do, therefore, occupy four sides of the octagon; whilst the remaining four sides are formed of large flag stones, about 6 feet high, and near 4 feet wide, set on end.

The conical, irregular dome over head, is formed manifestly without the least design of composing *an arch*, or really vaulted roof; and without the least knowledge of the mode of constructing any such thing; for it is formed merely by the *over-hanging*, or *over-lapping*, of the stones.—The setting in, or projection inwards, of the super-incumbent stones, begins at various heights, from 8 to 9 or 10 feet, on different sides. At the height of 15 or 16 feet; the north and south side of this coving run to a point like a gore; and the coving continues its spring with six sides: the east side coming to a point next; it is then reduced to five sides: the west closes

next; and the whole ends and closes with four sides, not tied with a key-stone, but capped with a flat flag stone, covering a space only 3 feet 10 inches, by 3 feet 5. The whole is therefore obviously composed of great long flat stones laid one upon another, having the end of each upper one projecting a little beyond the end of that immediately under it, till at last only the small space was left, which is covered by the stone laid over the middle.

The side recesses are formed in as rude a manner as this central dome. That to the east, on the right hand of the entrance, is about 8 or 9 feet in length; about 4 feet wide at the entrance; and 6 at the further end: and has each of its sides composed of two upright stones, about 7 feet high; has another, only 6 feet high, quite at the end; and is covered with one large flat stone, which, from the inequality of its supporters, lies sloping. The northern recess is constructed in the same manner; but is a little more than 4 feet wide at the entrance; and 7 feet 9 inches at the further end; whilst it is not above 6 feet in height.—The recess on the west side, or to the left of the entrance, is smaller than the others; being not above 4 feet in length from its mouth, whilst it is above 7 feet wide, and 6 high: and its sides are formed each only of one stone set on end.

In the niche opposite to the entrance, is placed, on the floor, a long flat stone, 6 feet 8 inches long, by 4 feet 11 inches broad.

In the larger niche, which is on the right-hand side, stands a great stone oval bason, above 4 feet in diameter one way, and above 3 the other; and this bason is placed on a stone, 6 feet, by 5 feet 4 inches, in its dimensions.

And in the smaller niche, or Kistvaen, on the left hand of the passage of entrance, is another stone bason; of the same oval form, standing on the plain and original ground. Which bason is nearly of the same capacity with the other; being 4 feet 4 inches, by 3 feet 7.

Whether these Basons were designed as urns, to contain bones and ashes; or whether they were designed to contain victuals, and libations; or to hold any supposed valuable effects deposited with the dead; still we have in the whole of this sepulchral structure, something very similar to the tomb of Patroclus, and Achilles.

A repository for the body, or ashes of the person first interred;—vessels of respect, and imaginary honour, for the holding something

interred with him ;—a long, narrow gallery, reaching from the central vault, to the external part of the base of the Tumulus, or Barrow, for the purpose of conveying into this Sepulchre, the bones, or ashes, of some friend, or relative, that should, after the first interment, be deposited there.—And, when this second interment was made (as it actually appears it was, by the bones of two bodies being found), the whole mass appears to have been again further enlarged, by increasing the dimensions of the external Tumulus, or Barrow, so much, that the very entrance of the gallery was inclosed at least 40 feet within the limit of the utmost base of the mount.

It only remains to add, that Governor Pownall observed here, on some of the stones, traces of a *spiral line*;^{*} and on one other stone, *deep indented marks*, which he took for antient Phœnician characters.—What these latter might be, I will not presume to say ; but I cannot forbear suspecting, that the former (like those on some of the Irish Cromleches), are neither more nor less than the fossil impressions of the *Cornu Ammonis*, so often met with, on various fragments of stone, both in Ireland, and in this country : which are, indeed, as it were medallic impressions, bearing testimony to astonishing changes on the face of the earth, and in the structure of this globe, long, long prior to the rearing of any Barrows, or to the existence of any Phœnician characters.

And I am the rather induced to harbour this suspicion, because the governor also found, on some of the stones, certain other lines, forming a *kind of trellis work, in small lozenges* ; which description exactly answers to the appearance of several fossil impressions, of the hard skins of fishes ; which I have seen on stones, from various parts, both in this country, and elsewhere.

Very similar to this great Barrow, in its external appearance ; (though not of such vast dimensions,) and most probably, very similar also to it, in its internal construction, is one that has been already mentioned, on account of its having a Stone Pillar placed on its summit, like the tomb of Ilus, in Asia Minor ; and which is represented Pl. XII. fig. 1.

* *Archæologia*, Vol. II. p. 225.

It is situated near Tullagh, in the county of Caterlogh, in Ireland.

There is also said to be such a cavern as that at New Grange, under a very large Tumulus,* or Barrow, on the brow of an hill near *Douth* on the Boyne, in the county of Meath. And that this was coæval with the works of the aboriginal inhabitants, and with the rude age of Druidism in Britain, seems to be clearly pointed out to us, by a Circle of large unhewn stones, 21 feet in diameter, standing in the neighbourhood, with the remains of a Cromlech on its north side; and having, moreover, a large flat stone lying on the ground, before the entrance.

Thus we find, as we approach nearer home, that the resemblance between our great Barrows, and those with regard to the construction of which, in the earliest ages, in Asia, there are most undoubted records, is so exceedingly strong, that they have a much nearer affinity to those works, though so remote from them, than to any works in these parts, concerning which, we have any tradition that can be relied upon. For nothing can be more vague, and unsatisfactory, than the common account usually given, of their being Danish works; which account has taken its rise, merely from the hasty opinions of those who first began to investigate these matters, as deserving attention, in these latter ages. We may, therefore, from such strong resemblance between primæval, and nearly Patriarchal customs in the East, and these aboriginal works in Ireland, and Britain, in the West; much more rationally infer, that these Sepulchral Barrows, are almost without exception, the works of the first race of settlers in these countries; who retained primæval customs, and usages, till they were disturbed and driven out of them (as well as out of their possessions), by the Romans, and other invaders; and were converted to a different mode of life, and manners, by the embracing of Christianity.

And we may the rather draw this conclusion, because we are told, both by *Cæsar*, and *Pomponius Mela*,† that the Gauls, (whose superstitions, and manners, Tacitus also affirms‡ were the same as those of the Britons;) just as the antient Asiatic nations did, threw into

* Gough's Camden, Vol. III. p. 564: and Wilson, p. 452.

† *Cæsar de Bello Gal. lib. vi. cap. 18.*—*Mela, lib. iii. cap. 2.*

‡ Tacitus, *Vita Agric. cap. xi. Eorum sacra deprehendas, superstitionum persuasione.*

† *Cæsar de Bello Gal. lib. vi. cap. 18.*—*Mela, lib. iii. cap. 2.*

‡ Tacitus, *Vita Agric. cap. xi.*

the funeral pile, on which the body was burnt, such things and animals as the deceased most delighted in; and even some of his favourite slaves. And that there were instances, in which near relations and friends had destroyed themselves, and perished in the same fire, on such occasions.

Almost every Tumulus and Barrow, great and small, that we have any accurate accounts of, indicate the complete similarity between their original construction, and that of those in the East.

A few of them, that have been particularly described, in our own Island, are now worthy our attention, as confirming this idea.

In the neighbourhood of *Blagdon House*, at no great distance from Bath, is a considerable Barrow, that has long been called *Fairy's Toole*; (which kind of superstitious name, is in itself indeed an indication of its high antiquity.) It is 150 feet from east to west; and 75 feet in breadth; and of a proportionable height. It appears to have been first constructed by piling up fragments of whitish stone, with which the adjacent country abounds; after which it was turfed, so that there still remains a layer of grassed earth, of 5 or 6 inches deep, covering the whole; on which grow several trees.

And upon endeavouring to remove some of the stones, for the repair of the adjacent roads, in 1789,* there was discovered, on the southern side, not far from the west end of the Barrow, a large stone in a sloping position, which closed up the entrance of a gallery, whose height was a little more than 4 feet. The wall of this passage was built up of base free stone, less in length than in breadth, and about 14 inches in thickness. And at the distance of 13 feet directly north from the entrance, was found a *Kistvaen*, or Sepulchre, composed of rude stones, which was 9 feet long; 4 feet high; and 2 feet 3 inches wide; and in which was an human skull, and some other bones, and also those of some quadruped. The roof of the gallery having here fallen in, prevented any further accurate examination in this part; only it was possible to see, by the light of a candle, that there were two other similar Sepulchres, one to the right, and the other to the left. This tumulus being opened in another part of the southern side, the gallery appeared again, formed

* See a very particular account in the Gentleman's Magazine, Vol. LIX. p. 392.

of three stones, two perpendicular, and one horizontal; and here were discovered some more Cells, or *Kistvaens*, on the sides, containing human bones. But the thorough examination of the gallery was not perfected.—It appears, however, plainly enough from hence, that there was no small similarity between the construction of this Tumulus, and that at New Grange in Ireland.

The great Cairns, or Barrows, in Anglesey, of a similar kind, have already been mentioned, (p. 232.) One of them, near Plas Newydd, (which is exceeding large, and the stones of which, like that in the preceding instance, are covered with earth and moss, and have great trees growing thick upon them,) having been opened since Rowland's time, discovered a passage, and a cell,* about 7 feet long, and 3 wide, covered with two flat stones.

And another of them, near the seat of Sir Nicholas Bayley (now Lord Uxbridge), having also been opened, there was found † a passage, about 3 feet wide; and 4 high; and about 19½ feet long; that led into a small room of an irregular hexagonal form, the sides whereof were constructed of rude slabs of stone; and the roof of which was covered with one great stone, near 10 feet in diameter; supported, moreover, by a rude stone pillar in the middle. And all round the sides of this little room was formed a stone bench, on which lay human bones, that fell to dust almost at a touch.

And a third Cairn of immense size, at *Tre-garnedd*, is understood to have beneath it passages, ‡ formed on the sides and tops with flat stones or flags: and is very justly deserving therefore to be mentioned, whilst we are considering those that have any resemblance to the great Cairn, or Barrow, at New Grange.

The next that more particularly claims our attention, is that vast one called *Silbury Hill*, near those other stupendous British Remains, at Abury, in Wiltshire.

It is 500 feet in diameter at the bottom; § 170 feet in perpendicular height; and 105 feet in diameter at the top. A work surely deserving to be compared, in point of magnificence, with that of Alyattes; and which could never be raised by Danes, or Saxons,

* Pennant's Tour in Wales, Vol. II. p. 235.

† Ibid. p. 262.

‡ Pennant's second Tour in Wales, Vol. II. p. 261.

§ Gough's Camden, Vol. I. p. 110.

during their invasions; nor by any people, except in time of peace, and with the aid of a vast multitude.

Part of an human skeleton, and a very antient horse's bit were found, in digging upon it to plant some trees, in 1723; which seem to indicate, that to do honour to the great person interred at the bottom, and to whose memory this astonishing work was reared, there were both captives, or slaves, and horses, slain, and their remains interred around him; as was done on raising the funeral pile for Patroclus;* when four horses, two favourite dogs, and twelve captive Trojans were slain, and their remains covered at last by the Barrow that was raised on the occasion; and as was also usually done, on raising the great Barrows over the Scythian Kings.† An attempt was made, a very few years ago, to sink a well perpendicularly, in order to discover the contents of this vast Tumulus; but nothing was found except a rotten post, and something which had the appearance of a rusty knife. We must therefore conclude, either that this well was not sunk *in such a part* of the extensive area covered by this mount, as to be near the cavity where the body had been deposited; or else, that the body, at the time of its interment, was not inclosed in a cell, or vault of rude stones; but in a cell merely formed of timber, as some of those of the Scythian Kings described by Herodotus,‡ seem clearly to have been; or as some of those, mentioned by Colden,§ as formed for the reception of the bodies of Indian Chiefs were; and that this rotten post, was the remains of one of the strongest supporters, whilst in other parts, the whole had fallen in, and was with the body entirely consumed and decayed.

It seems probable, from the appearances on the opening of many Barrows; and especially from the appearances of those of the smaller kind, which have so often a cavity, or sinking in, at the top, that the bodies were originally deposited in such sort of cavities formed merely of rude pieces of wood, and that the sinking in of the Barrow, in the centre at the top, was merely the consequence of the decay of this rude kind of receptacle. But however this may have been, in the instance of this great Barrow at Silbury, there is

* Iliad. lib. xxiii. ver. 171. 175. 255.
p. 313. ed. Wesselingii.

† Herodotus, lib. iv. 71.

‡ Ibid.; and see before, p. 279. 285.

§ History of the Five Indian Nations of Canada, p. 16.

every reason to conclude, from bones having been found in it, that it was a sepulchral Tumulus; and from its vicinity to Abury, that it was of British construction.

And indeed, we need not have recourse to the supposition of the body, or ashes, having been inclosed merely in a cell of wood, in order to account for no other remains having been found on sinking the well in the centre; because in clearing away a large Barrow in Derbyshire, it was found that neither of the two *Kistvaens*, which really belonged to it, were placed at all near the middle.

This Barrow was on *Fin Cop Hill*, about two miles from Ashford; and had near it earth-works, with a ditch on the inside of a vallum, (as at Stone Henge,) a ditch of that kind which are so peculiarly known to be *Druidical*. It was 161 feet in circumference; or between 50 and 60 feet in diameter; and of considerable height. In the latter end of the year 1795, it was destroyed, for the sake of obtaining the great quantity of limestone it was supposed to contain. And it was found composed of fragments of limestone mixed with fine dry mould. But no *Kistvaen*, or any kind of Sepulchre, was found *in the centre*. Yet here had plainly been an antient interment of the most splendid kind, with the greatest care. Several arrow heads of *flints* found in it, shewed its high antiquity. And bones, and skeletons, lying in some parts, seemed plainly to indicate that there had been an immolation of captives, or other wretched victims. But the *Kistvaens*, in which remains of bodies had been deposited apparently with the utmost care, were found *remote* from the centre. And the one, which seems to have been that of the greatest consequence, was even the most remote. It was on three sides hewn out of the solid rock; and had one flat stone placed at its end, and another at the top. It was only 2 feet 9 inches in length; and 2 feet in breadth; and 1 foot 9 inches in depth. But in it were found bones, which as well as those in the other *Kistvaen*, seemed to have been collected after burning the body. And the skull was, in a most remarkable manner, placed with the face downwards; and an oblong piece of dressed black Derbyshire marble carefully fixed, by strong cement, to the back of the head; under which were found two arrow heads of flint. There was also a flat round varnished stone in this *Kistvaen*, which seems to have been some ornament for dress.

The other Kistvaen, which probably contained the remains of the queen, was of the same form, but of less dimensions; and was constructed only of four stones standing on an edge, with one to cover them. And had the bones and ashes thrown in promiscuously, and no arrow heads. There were, however, some urns of very coarse baked earth, found near the rim of the Barrow; in one of which was also a flint arrow head. And these, it is probable, might contain the ashes of some of this family who had been interred *after* the rearing of the Barrow; as the ashes of Achilles are said to have been deposited in the Barrow of Patroclus. But one cannot form the same conclusion, with any propriety, with regard to the two skeletons that were found lying flat on the ground; near which, was also found another spear head of flint.* For they seem to have been denied both the honour of being burned, and of being inclosed in *Kistvaens*.

The same conclusion, as concerning Silbury Barrow, we must also unavoidably form, concerning another large Barrow at Merdon, or *Merden*, notwithstanding what is said, and conjectured, with regard to a battle fought there, between Alfred and the Danes in 871; neither of whom could have had time, or assurance of security, long enough, to rear this mount, which is at least 240 feet in diameter, and of considerable height. The many large stags' horns also, found buried near the spot, indicate a different age, and observances of rites and customs of far prior times.

Another great Barrow near 300 feet long, and of great breadth; called *South long Barrow*, near Silbury Hill, seems to be, on account of its situation, undoubtedly British: and so also does a great one at *Monkton*, called *Milbarrow*; which is near 200 feet long, and above 30 broad; † and was set round with stones 6 or 7 feet high.

And as the vicinity of Abury to these works, plainly bespeaks *their* origin; so the multitude of smaller Barrows, within sight of Stone Henge, seems most fully to prove *their* connection with that structure, and with the aboriginal Britons.

They are generally placed on elevated ground, within sight of

* See a very full and curious account of this Barrow in the *Archaeologia*, Vol. XII. p. 227; with representations of the spear heads, Pl. XLIX.

† Gough's *Camden*, Vol. I. p. 111.

that seat of antient dire superstition ; insomuch, that one may, from thence, count even fifty at a time, in an evening, when the sloping rays of the sun shine on the ground beyond them. And they are generally, though small, yet of an elegant campaniform shape, constructed with great nicety ; which, together with their peculiar situation, as has been well observed, plainly shews that they are not the vestiges of tumultuary burials of persons slain in battle ; but rather the Sepulchres of distinguished personages, interred on what was deemed a sacred spot ; and interred in times of peace.*

On examination of their contents, they have been found to consist of a coat of turf ; a layer of chalk 2 feet thick ; then another of fine mould ; and under this, 3 feet from the surface, of a layer of flints 2 feet thick, somewhat like other layers that have been found in Dorsetshire ; and last of all, of a second layer of mould 1 foot thick, inclosing both human skeletons, and rude unbaked urns, holding burnt human bones.† Sometimes also were found spear heads ; *glass and amber beads* ; wood ashes ; bones of horses, and other beasts ; a sort of pole-axe ; a sword ; or a celt ; and fragments of stone.

We may now add, that besides these smaller Barrows, the great Barrow in Lord Pembroke's park at Wilton, is also in sight of Stone Henge.

The great Mount at Marlborough, has been observed to be also in the vicinity, if not in sight of Abury ; and has therefore been sometimes hastily considered as a great Barrow.‡ But I shall have

* The view and appearance of Silbury Hill, compared with that of the Herefordshire Beacon, or indeed with that of any other Hill Fortress, shews most characteristically the difference between *the Barrow*, and *the Stronghold* ; and the comparison of the same magnificent Remain, with the appearances of the *Norman Mounts*, at Tunbridge ; at Oxford ; at Wallingford ; and at Lewes ; or Clare ; shews, as precisely, the difference between the *great high Barrow*, and the *Norman Mount*.

The distinguishing smoothness of the Barrow, and gradual easy ascent ;—the bold projecting works, and ramparts of the Hill Fortress ;—and the obviously intended *glacis*, and *steep* of the Norman Mount ; with the top adjusted to the foundation of the great Keep Tower ;—are decided marks, that will almost always prevent any confusion.

The form of *low Barrows*, is also as certainly and easily to be known. Many of them may be seen from a part of the road very little distant from Silbury ; where the scene they form, will soon make any intelligent eye acquainted with the general appearance.

† See Gough's Camden, Vol. I. p. 108 ; and Stukeley, &c.

‡ Archæologia, Vol. II. p. 237.

occasion hereafter to shew, that this conclusion is founded in a mistake; and that the Mount at Marlborough, was no Barrow at all; but raised by the Normans, as the foundation of a great Keep of a Castle, at that place, consistently with the construction of all their earliest castles; the mounts of which, are every where to be most carefully distinguished (as they easily may be), from Barrows.

Barrows themselves, however, as appears even from the preceding pages, are not always of the same form.—And there is, in Dorsetshire, an immense Barrow, between Bridport and Dorchester, that well deserves to be compared with Silbury Hill, though it be of a quite different construction.—It is 749 feet in length;* and 161 feet in breadth; and 147 feet from the foot to the summit, measuring one of the sloping sides. It is called Shipton Hill.

Of the same kind seems to be a great Barrow at Cossington, in Leicestershire, nearly three miles to the south-east of Mount Sorrel. It is about 350 feet long; 120 broad; and 40 high. The people of the country call it Shipley Hill; and have a tradition that some great warrior was buried under it: or, as they express it, some great captain.†

Of the same kind also, seems to be that well-known Barrow in Kent, near Chartham, called *Julaber's Grave*; supposed by Camden to be the Sepulchre of a Roman Tribune, Quintus Laberius Durus; though he acknowledges ‡ that the tradition of the country concerning it, like the tradition concerning many other British memorials, intimated that Julaber, instead of being a Roman, was either a giant, or a witch. We are left at liberty, therefore, to conclude *this* to have been (consistently with the uniform appearances of so many others), a British Barrow of high antiquity; long preceding the time of the Romans. It is, like that in Dorsetshire, of greater length than breadth; and is placed upon a chalk hill, near the side of a river, half way between Swerdling Downs and Shellingheld.

* This is near 150 feet more than the diameter of Silbury Hill. Hutch. p. 342.

† Description of England, Vol. V. p. 203.—Gough's Camden, Vol. II. p. 210. There are trenches on the top of this Barrow; supposed to be modern, and cut merely for amusement.—But it is by no means impossible that they may, *at first*, have been more antient than is imagined.—We cannot forget what we have had occasion to remark, from *Herodotus*, with regard to the Barrow of *Alyattes*; p. 273.

‡ Gough's Camden, Vol. I. p. 215.

What has induced the curious, more than any other circumstance, to suspect this to be a Roman Barrow is, that on examining the contents of some small Barrows, in its neighbourhood, there were found, lying in graves cut in the chalk, together with bones and urns, a bracelet of gold; fibulæ ornamented with garnets and coloured stones, and gold filagree work, and ivory; a chrystal ball; a gold clasp; brass pins; garnet pendants: amethystine beads; glass, and other beads; umbos of shields; and spear and arrow heads.* And it has been thought, that such a multitude of ornaments, many of which were of nice work, and of costly materials, could not but be proofs, that the persons interred were Romans, and not rude Britons.

But besides taking into consideration the fact adverted to, in what has been remarked concerning the habits of the Britons, that *some* of them had ornaments of gold; and that many of the articles mentioned, such as the *beads*, and arrow heads, are more likely to have been British than Roman; I must beg leave to observe *here*, once for all, that when ornaments and arms, *decidedly Roman*, have ever been found under Barrows, they were, in all probability, the ornaments and arms of Britons, in Roman service.

For as we have not any instance, that I am acquainted with, (except the two I have already mentioned,) of the Romans raising any Barrows, in any one part of the world; so indeed, the *Roman interments*, wherever we meet with them, even in the neighbourhood of Barrows, and almost close to them, are of a very different kind.

On which account, it is much more reasonable to conclude, that all the Barrows that are met with in the parts any where adjacent to Roman camps, and stations, were either long prior to the Romans having possession of those spots; or else were the Barrows of British officers, who had at length entered into Roman service, but retained so much of their antient customs, as to have *Barrows* raised over their remains, by their fellow countrymen, on their decease.

In the neighbourhood of the great Roman camp at Chesterford, in Essex, on the borders of Cambridgeshire, in a spot just without the vallum, near the present mill, I saw myself, in the year 1785, four very large stone coffins, of a very singular form, and different

* Gough's Camden, Vol. I. p. 242.

from those used in any ages after the times of the Romans. These coffins had just been dug up; and were found in a spot where I could not discern the appearance of any thing like antient Barrows. They were quite round at the head, both within and without; were about 7 feet long; 14 inches deep at the head; and 10 inches deep at the feet; and were each of them covered with a large flat stone lid, about 8 feet long, that was made round at the bottom end, over the feet; and in the form of a demi-hexagon at top, over the head; where, on the contrary, the coffin itself is rounded. There was no groove in the lid, for fixing it fast; it being merely laid down flat upon the stone Sepulchre. But there was yet a most remarkable circumstance, in the construction of the lid itself; for on its inner, or lowermost side, there was a large sloping hollow cut, more than a foot in length, and of a proportionable breadth, excavated out of the thickness of the stone, which was very great; and situated just over where the breast of the body interred must have been placed; which hollow was therefore manifestly designed, to receive either the umbo of a shield, or the handle of a sword.

In each of the coffins was found a great mass of lime; which having been put in at the time the bodies were deposited, had devoured and corroded, both them, and all the other contents of the chests.*

With these coffins were dug up, at the same time, some brass coins of the Emperor Claudius; one of which I have in my possession. And we may fairly add, that whilst these were an indication that the coffins must have been Sepulchres, connected with the great Roman Castrum, in the very earliest periods in which the Romans had possession of this country; there was the strongest proof, from their situation *just without the Vallum* of the Castrum, that there never could have been any *Barrow* here: nor any thing to connect this mode of interment with that of *the British Officers* under Barrows.

In like manner, in the Roman Sepulchres, discovered near the remains of the antient Roman Villa, near Mansfield Woadhouse, †

* There was a similar kind of interment discovered near Colchester; about the year 1776, where, in the mass of lime contained in the coffin, were found some yellowish nodules of a pyritical kind; which probably were occasioned by the decomposition of the iron weapons.

† *Archaeologia*, Vol. VIII. p. 375.

in Nottinghamshire (so accurately described by Mr. *Rooke*); there was nothing like the appearance of the kind of interments of the Britons; nor like a Barrow.

So at Ash in Kent, at no great distance from the very first great Castrum of the Romans, called *Richborough*; though too far off to suppose it, reasonably, to have been the usual, and proper burying place belonging to that Castrum; have been found the remains of some interments of the Romans;—in some respects indeed, of another kind from those just mentioned; but yet quite different from those of the Britons, and from interments under Barrows. Though, indeed, some interments under Barrows of a British kind have also been discovered on this very spot, and sometimes confounded with the other.

In a sandy field, which seems to have been the burying place of some distinguished Romans; and which is on a rising ground, above the marshes, intervening between it and *Richborough*; on the right hand of the road from Canterbury to Sandwich; were found several bodies, inclosed separately in cavities, formed by wooden boards, at the depth of about 4 feet. A sword was found generally put on the right side, and a spear on the left of each. And several Roman medals, of the Upper and Lower Empire, were found in these graves.* Yet, at the same time, not very far from these Roman graves, have been found not only small Barrows containing truly British remains, all of which are well described in the *Nenia* of Mr. Douglas; but also some large Barrows: and particularly one at *Winsborough*; and again another between that and Sandwich, called *Marvill Hill*; which Barrows one cannot reasonably conceive to have been constructed by the same people, who formed such very different kinds of graves near this very spot. One might as soon fancy the urns, and pins, found on digging the foundations of St. Paul's, to have belonged to the Normans.

Again, in the North of England; all the discoveries that have

* There were a variety of other articles dug out of these graves; such as scales; and a touchstone; and many glass vessels; and fibulæ of filagree, and other curious workmanship, with coloured and precious stones. Many of which I have myself seen in the cabinet of the late Mr. Faussett of Heppington, near Canterbury; and of which some account is given in Gough's Camden, Vol. I. p. 243.

been made with regard to the interments of the Romans, though different from either of the former just described, yet plainly appear to have had no sort of connection with the raising of Barrows.

Near York, in 1768, was discovered a Roman Sepulchre, in the form of a little oblong room;* formed of large Roman tiles, of a very peculiar figure, set on edge, on each side; and at the two ends; and covered with other tiles of the same kind, set leaning against each other, in the manner of a pent, or ridge. In this little space were found several urns, containing some ashes, and earth, standing upon a tiled pavement. And near it were found two coins of Vespasian and Domitian, and also a silver ring seal; and on the tiles was impressed, *LEG IX HIS*. But there does not seem to have been the least appearance of a Barrow belonging to it.

We are told also, that several such Roman Tombs were found about 1720, near Stratsburg, in Germany.

And in other places, where Barrows still appear, there are the most positive proofs, from remains of interments most clearly Roman, (but of a far different kind, from those in the Barrows near adjoining,) that the Barrows themselves could have no connection with the times of the Romans, or with persons at all connected with the Romans, any further, than that possibly *British Chiefs*, retaining their own usages and customs, might be interred there.

In Trelech parish, in Caermarthenshire, (a country that abounds with antient Fortresses, Camps, and Barrows,) there is a very remarkable Tumulus that has been opened. The circumference at bottom is about 60 paces, and the height of it about 18 feet; rising with an easy ascent.+ There appeared an hollow, or sinking in at the top: and on examining this, there was discovered a vast rude flat stone, of an oval form, about 9 feet long; and 5 feet wide; and near 1 foot thick, which covered a *Kistvaen*, or rude chest, $4\frac{1}{2}$ feet long, and 3 feet broad, composed of rude stones standing up; one on each side; one at each end; and one behind each of the end stones, as a support. And within this chest were some remains of bones, and other fragments. The name of this Barrow in the country, is *Krig y Dyn*; and it has with great propriety been deemed by Mr.

* *Archaeologia*, Vol. II. p. 177, 178.

+ *Gough's Camden*, Vol. II. p. 510.

Lluyd to have been the Barrow of a British prince. In this same county, however, and at no great distance, are found manifest traces of the Romans; to whom some persons might therefore have been ready to have ascribed the raising this Barrow; but their own real interments, near adjoining, appear to have been in plain graves, with stone pillars, and Roman inscriptions.

This Barrow was plainly formed, like many others, of a vast heap of stones, piled round the Chest, or Kistvaen, and then covered with turf.

In like manner there is a Tumulus in Denbighshire, called *Barrow Hill*; about three miles from Ruthin. And near it also, is a very different kind of Roman Sepulchre; for it is placed in a sort of hollow about 8 feet in diameter; and has two stones, standing above the surface of the ground; one, as it were, at each end of a grave, about 4 feet long; and on one of these stones are rude letters,* that Mr. Lluyd deemed to have denoted the interment of some Roman officer.

So in Merionethshire, on the side of the road from Dolgelly to Tanybwllch,+ on a plain part of a mountain are many Barrows. And at no very great distance, proceeding further on the road, are, again, a considerable number of graves, of a very different kind; resembling, and connected with some others which have Roman inscriptions.

So also, in Northumberland; not far from *Elsdon*, are some Tumuli; and one large one, called Harnsley Hill.‡ Yet here also, in the neighbourhood, were found Sepulchral Roman inscriptions, which belonged to graves, of a quite different kind.

From this decided distinction, therefore, of Roman graves in general from Barrows, we may fairly conclude, that even where Roman coins, or medals, or Roman insignia have been found in Barrows; that still those were indeed British Barrows; only raised, in the later times, over such British chiefs as were in Roman service.

Thus we find there were some Roman coins, and particularly one of *Vespasian*, discovered on opening a considerable Tumulus, about three miles from *Aldbrough*, in *Yorkshire*; in the years 1785, and

* Gough's Camden, Vol. II. p. 578, 579; where the inscription may be seen, Pl. XX. fig. 3.

+ Ibid. p. 544.

‡ Ibid. Vol. III. p. 248.

1787. The elevation of this Tumulus was about 18 feet; and its circumference at the base 370. In it were found rude urns, composed of blue clay and sand; which may much rather be conceived to have been of British manufacture than Roman. These contained burnt bones and ashes:* and, what is very remarkable, there were a great number of bones found on one side of the Tumulus, separate from the urns; which may lead us to suspect, that it was raised after some battle.

On opening also a Barrow of earth, on the common of Winster, in Derbyshire, which stood amongst divers other Barrows, or Cairns of stone, were found some well wrought ornaments; and particularly one that was circular, about 2 inches in diameter, resembling the cover of a fibula; similar to some of those found at Ash near Richborough, in Kent; and which therefore appears to have been Roman. It was composed chiefly of filagree, or chain work of gold, or silver gilt, and set with garnets, or red glass.† There was found also a silver collar, or bracelet, studded with figures of human heads: and two glass vessels, between 8 and 10 inches in height, with wide circular mouths, and a little bulge in the middle. But as the conclusion concerning *all* these being Roman is rather equivocal; so indeed there being several square and round beads of various colours, of glass, and earth, found with them, does much more plainly shew, that the Barrow was raised over some Briton of distinction; who, even in the later times, and though dwelling amongst the Romans, yet retained *these latter* so peculiarly British ornaments.

Again, on Barham Downs, in Kent, there are a great number of Tumuli, or Barrows; some of which are of considerable size; and most of which, if not all, have been opened: Mr. Fausset, formerly of Heppington,‡ having alone been the means of opening upwards of seventy. Some of them contained a variety of curious ornaments, which were most probably wrought in Roman times; and which I have myself seen at Heppington;§ such as fibulæ of filagree

* There is an account of this Barrow in the Gentleman's Magazine for 1787, p. 564.

† Archaeologia, Vol. III. p. 274. ‡ Hasted's History of Kent, Vol. III. p. 753.

§ A very exact representation, and account, of many of these remains of antiquity, has been published by the Rev. Mr. Douglass, in the *Nenia Britannica*. Who has also added

work in gold, set with garnets, and coloured stones of various kinds and dimensions; similar to that just described, which was found in Derbyshire; bracelets, chains, spoons, knives, keys, spear heads, rich handles of swords, with glass vessels: and a *denarius* of *Tiberius*, was also found near some of them.

There are undoubtedly great remains of Roman works on these Downs; and a Roman military way runs along the lower side of them: yet, from the numbers of *beads* found in these graves, with bracelets, and necklaces of *glass beads*, all of which are so peculiarly British, one cannot but conclude that these were British graves, although made in the time of the Romans. And indeed Mr. Faussett himself was convinced, from all the best observations he could make, that they were the very graves of the inhabitants of the neighbouring villages: of men and women, promiscuously buried in them, at different times: only with this distinction, that those with military appearances in them, were of persons who had been soldiers.

Thus, in like manner, as I mentioned on a former occasion, near Addington, in Kent, on the Downs, situated on the Coombe Hills, are small Barrows still existing, of persons who had belonged to the antient British town, which tradition says, was in those parts; and to which the remarkable adjacent *hiding pits* belonged.*

A Barrow of immense size is said to have existed, and to have been opened, on Barham Downs, in the time of Henry VIII.; in which was found a large urn with bones; and brass and iron helmets; and remains of shields.

In the same manner in which we have reasoned concerning these Barrows on Barham Downs, we may also fairly reason concerning the urns, with both Greek and Roman coins in them, which Aubrey says, were found in Barrows on Exmore, in Devonshire.†

And in the same manner we ought surely to reason, concerning a Barrow near Pakefield, in Suffolk; in which was discovered,‡ in

most exact descriptions of the contents of many other Barrows; which I do not particularly mention; because I wish rather to refer the inquisitive reader, to the perusal of that very curious work itself, however I may differ from the author in some few points.

* See p. 50.

† Gough's Camden, Vol. I. p. 35.

‡ Ibid. Vol. II. p. 90.

1758, a skeleton; round the neck whereof remained an ornament, with an onyx set in gold, and also a gold medal, appendant, of *Avitus*, who had been set up by Theodoric, King of the Goths, about 455, and was deposed by Ricimer.

And if we may fairly conclude even these Barrows, containing insignia of the times of the Romans, to have been *British*; how much more strongly may we form the same conclusion with regard to almost all the rest; excepting only some few of those which appear to have been decidedly reared in consequence of battles.

In Dorsetshire, besides the great Barrow called Shipton Hill, which has been already mentioned, there is another, near Pimpern, called *Long Barrow*, which is 224 feet long, and 10 feet in perpendicular height; being of the kind which Dr. Stukeley believed to have been raised over some of those who were esteemed the heads of the classes of the Druids. Others of the same sort, standing single and solitary, are found in different parts of the same county.* And one of them, near Bradford Peverel, is surrounded at the basis with rude stones.

In the county of Dorsetshire also, on *Nine-Barrow Down*, are some small and round ones near adjoining to each other; which seem to have been very much of the same kind, and for the very identical purpose, with those mentioned on *Barham Downs*, in Kent.

And, in 1767, a great Barrow, 100 feet in diameter, and 12 feet in height, near Wareham, in Dorsetshire, was opened; and there was found in the centre, at the bottom, even with the surface of the ground, a very large hollow trunk of an oak rudely excavated, 10 feet long, and containing a cavity 3 feet wide, in which lay several human bones, wrapped up in a covering composed of several skins; which, by remains of the hair, appeared to be deers' skins. At one end of this rude chest was found, what has been called an urn, made of oak; but which, from its dimensions, we may much rather conceive to have been a small drinking cup; or else a vessel used for libations; its diameter being only 3 inches, and its depth within, 2.† There was found also a piece of some kind of gold lace, 4 inches

* See an account of some of them in the Gentleman's Magazine for 1768, p. 113.

† A very curious account of the contents of this Barrow is inserted in the Gentleman's Magazine for 1767, p. 53.

long, and $2\frac{1}{2}$ broad, with bits of wire in it; but there were not the least fragments of brass, or iron, or remains of spear heads, or celts: from all which circumstances it seems plainly to appear, that this was indeed the grave of a Druid; and especially from the oaken cup, and the *piece of gold lace*, with its wires; as the Druidical reverence for the oak is well known; and their actually wearing ornaments of a kind of gold lace, has been mentioned, from the highest authority of antient writers, in the preceding part of these observations.

In some other Barrows also, that were opened in Dorsetshire, the appearances still confirmed the idea of their being British.*

A Barrow, about 200 feet in circumference, and 12 feet in height, well known by the name of *Hambury-taut*, or *toote*, situated on the highest point of a lofty hill, about midway between the points of Portland and Purbeck Islands, being examined a few years ago, there were found, a little beneath the surface, and also near the extremities, burnt human bones, and bones of different kinds of animals; bits of metal, and other fragments; all placed as if they were the remains of captives, and animals, who had been slain and burned at the time of the forming the Barrow; according to those horrid rites that were practised in the earliest ages. And lower down, in the centre of the Tumulus, was found a skeleton in perfect preservation, lying with its head to the North, in the posture of a person sleeping on his side; with the feet rather drawn up, and one hand on the breast: close to which was deposited a rude urn, too much decayed to be handled without falling to pieces. It was of the measure of about 2 quarts, but empty of every thing except fine mould. Near the neck of the person interred, were also found many small rounded stones, of different sizes, from that of a pigeon's egg down to that of a pea; which, as they were imperforated, seemed probably to have been set in some sort of ornament. Underneath this body appeared the foundation of the Barrow, composed entirely of flints and stones; and beneath these was found an heap of ashes, which were, in all probability, the very remains of the great funeral pile that had been erected on that spot; just as

* There is a most particular and exceeding curious account of the opening of some of these Barrows, by Mr. Milner of Winchester, in the Gentleman's Magazine for 1790, p. 897.

the funeral pile of Patroclus, had been on the very spot where his Barrow was afterwards raised.

Two other Barrows also were examined, opposite to East Lullworth ; on a level piece of ground, which is met with in the ascent of a steep mountain, on the top whereof is situated an antient hill-fortress, that *Hutchins*, in his History of Dorsetshire, without any other authority than a most strained etymology, conceived to be Roman ; but which has every appearance of having been British. And in these were found the same mixture of bones of men, horses, oxen, and boars ; with lumps of corroded metal ; and the same sort of coarse round stones, not bigger than children's marbles ; and also some pointed stones, appearing as if they had formed the heads of weapons. And the bottom of one of these Barrows, like that other which has been just described, was paved with large round stones. No entire skeleton, however, was found here.

In another of the numerous Barrows in that part of Dorsetshire, were found five skeletons, deposited at different depths, and in such a manner, as if they had been buried at different times ; and as if this Barrow (like some of those on Barham Downs, in Kent,) had been a *family burying place*. Each of these bodies had a rude urn upon it ; of such coarse and perishable materials, that except a few fragments of the parts near the rims, which appeared ornamented, in a sort of zig-zag fashion, they fell to pieces on being touched. And under the head of one was a small vessel of earth, about the size of the cup of a wine glass, covered with the shell of a limpet.

Five or six other Barrows, in the neighbourhood, appeared to have the same sort of contents : and the rough rudeness of the urns (so unlike the polished ones of the Romans, that are met with in so many instances), together with the rudeness of the ornaments, surely shew the whole to have been British :* whilst the situation of several of them, on lofty mountains, and sequestered downs ; intimates the same thing.

In another Barrow, about 150 feet in circumference, and about

* These are almost Mr. Milner's own words ; who also further most justly observes, that the Danes never seem to have been at all stationary in this part of the kingdom, till their princes, and the nation in general, professed themselves Christians, and therefore could not have either permitted, or used this kind of burial.

10 in height ; very near unto several others of the same kind ; on a shaft being cut down to the centre of the Barrow, there was found a kind of vault, (or rather a *Kistvaen*,) formed with unhewn stones ; and inclosing an urn that held about two gallons, full of burnt human bones, and covered with a thin flat stone ; having a quantity of the roots of quilch grass, undecayed, near it ; which also was sometimes met with in other Barrows. This urn, like the former, was of a coarse black clay ; not seeming to have been either turned in a lathe, or burnt in a kiln ; but to have been most truly a rude British urn.

Having seen how clearly these Barrows, on the most minute examination, appear to be British,—we may now venture without hesitation, to conclude that those in Berkshire, not far from the vale of White Horse, were also raised by the Britons. I mean those called *the Seven Barrows* ; and those others in their neighbourhood, near twenty in number, within an extent of six or seven hundred yards.* And we have still a further confirmation of this conclusion, from the circumstance of a Cromlech being within the distance of a mile from them, well known by the name of the *Wayland Smith*, and which seems plainly to have been a Druidical Altar ; notwithstanding the idle tales relating to it.

So another Barrow, called *Dragon Hill*, between White Horse Hill, and the *Ickleton Way*, may fairly be concluded to have been British.

And we may add, that the large Tumuli also, on that which is called *Four Barrow Hill*, near Chichester, appear, from their situation on the ridge of an high hill, not more than 60 yards over ;—from their vast dimensions ; (the most perfect being 51 feet in height,)—and from the name they have preserved, by tradition, of *the King's Graves* ;—much rather to have been British ; than to have been merely *Saxon Tumuli*, thrown up in haste after a supposed battle.

This idea also is confirmed, by the remarkable appearance of three adjoining circular hollows, on the ground, with circular raised rims ; two whereof are each 15 feet in diameter, and the third

* See Gough's Camden, Vol. I. p. 155.

18. It is confirmed also by the appearance of a sort of intrenchment, with the ditch *inwards*, carried in a sort of circular form round the top of the hill.* All which circumstances point out a connection with Druidical customs, and manners.

In like manner, the Tumuli not far from *Barrow* in Lincolnshire, may fairly, be concluded to have been British; as there is a remarkable earthwork near, which has every appearance of having been a work of the Britons; † and as, on being opened, there were found in these, both rude urns, and bones.

So on opening one of the round Barrows at Aldfriston, in Sussex, in 1763; ‡ after digging a few feet, there was found the skeleton of a man, lying on its side, in a contracted form; the bones of which were very hard and firm, owing to the nature of the ground in which they lay, which was a bed of chalk. And during the course of digging, there were also found ten different sorts of knives, or weapons, of different make; iron spikes; charcoal; a thin piece of yellow metal; and bones of brute animals. And in the middle, under a pyramid of flints, was found an urn, holding about a gallon of burnt bones, and ashes. It was carefully placed on the chalk rock, with about 4 feet of earth over it; and was of unbaked clay; and had some rude ornaments on the verge of it.—And in this instance, as in those just before mentioned, the unbaked urn, the burnt bones, and the rude weapons, plainly point out to us the earliest age in this country; whilst the entire preservation of *the one* skeleton, shew the Barrow could not have contained many bodies of persons slain in battle; as they would have remained entire, just in like manner, if that had been the case: and the bones of the brute animals rather indicate, that some victims had been slain on occasion of this interment, as was the usage in the most barbarous times. The whole, therefore, of the appearance leads us to conclude, that this Tumulus was British.

And the Tumuli near Whitby Strand, in Yorkshire; wherein

* There is an account of these Barrows, and Rings, and a representation of a section of them, in the Gentleman's Magazine for 1792, Vol. LXXII. p. 593.

† Gough's Camden, Vol. II. p. 273.

‡ Description of England, Vol. IX. p. 150.—Gough's Camden, Vol. I. p. 201.

have been found the remains of bodies, and their ornaments, have also very justly been concluded to have been British.*

So surely the Cairn that was opened in Craven, in Yorkshire, some years ago; and which stood upon a mountain, above the hamlet of Stackhouse, had great appearances of being British. It was about 9 or 10 yards in height, and of considerable diameter; (being about 210 feet in circumference;) composed of stones piled one upon another; with a small stone wall, or rampart, round the basis, somewhat similar to those described by Borlase, in the West of England. In the centre was found a *Kistvaen*, or stone Chest; formed of several stones of great magnitude, and thickness, and being about 6 or 7 feet long, and 3 broad; fixed in the ground; and covered with one vast stone. In this chest were certain partitions; and an human skeleton was found there, nearly entire; and also a circular piece of ivory, (or at least of a substance that appeared like ivory,) and the tusk of a boar.†

And as several other bones were found in this Barrow beside the one more perfect skeleton, there is reason to think it might be a family Sepulchre; unless those are to be supposed to have been the bones of captives slain at the interment.

The Tumuli also, on Barrow Hill, near Yealand, in Lancashire, may fairly be concluded to have been British: as, upon opening one of them, there was found an urn that had every appearance of being British; and a large *glass bead*, of a blue colour; and an human skeleton, adjoining to the urn; whilst the urn itself contained about three or four quarts of human bones calcined.‡

And still more strongly may a Barrow that was opened in the parish of Oddington, in Gloucestershire, in 1787, be concluded to have been British. It was but a small one: and, on being cut through perpendicularly, appeared formed of layers of large flat stones, of the kind with which the adjacent country abounds, interspersed with earth; but its contents were very remarkable. It seemed to have been a sort of *family Sepulchre*; containing the bones of at least six bodies; the ornaments of some of which appeared to be

* Gough's Camden, Vol. III. p. 80. † There is an account of the whole in the Gentleman's Magazine for 1784, p. 962; and in that for 1785, p. 417.

‡ Archæologia, Vol. VII. p. 414.

those of *females*: as the bones also were small. There were found, a bodkin, and a sort of large pin of copper. Beads of a sort of freestone, like some of those formerly described in these sheets, and of blue, and red, and green glass; and of amber; all perforated; and as many of them in number as would fill a quart pot. And besides these, were found, a fibula of copper, parts of a shield, and spear heads.*

The Tumuli also, in the Links of Skail, in the Orkneys, may with good reason be deemed British: their internal structure having so near a resemblance to some of those which have been described; and which undoubtedly contained British remains.

In examining one of them very carefully, † there appeared, first a large quantity of sand covering the whole; then a large parcel of great stones, which seemed to have been taken from the neighbouring sea shore. And, when these were removed, there appeared a Kistvaen, or Chest, composed of four stones, covered with a very large fifth stone. In which chest lay a skeleton, entirely preserved, in the posture of resting on one side, with the knees drawn up to the body, and the arms folded on the breast. And at the feet of this lay the remains of a bag of some very coarse vegetable stuff, containing the bones of a younger person.

And as the bones here were found in this remarkable posture; so in a Tumulus that was opened, near *Straness*, were found the remains of an entire body; which, by the position of the bones, appeared manifestly to have been placed in a sitting posture: ‡ and which, therefore, unavoidably reminds us of what has been said, concerning the manner in which some of the Indians, in America, placed the bodies of their departed heroes, under their Tumuli.

There are several other Barrows, in the Orkneys; under which have been found *Kistvaens*, or small cells, built square with stones, and a great stone lying on the mouth; and having black earth, or bones, in them. And under one of these was found a most remarkable cell, formed of an whole round stone, § like a barrel, hollow within, sharp edged at the top, and having the bottom joined like

* There are representations of several of them in the Gentleman's Magazine for 1787, p. 292.

† *Archæologia*, Vol. III. p. 277.

‡ Gough's Camden, Vol. III. p. 724.

§ Wallace's Description of the Islands of Orkney, p. 56, 57.

the bottom of a barrel ; and on the mouth a round stone ; and above that another large stone, for the preservation of the whole ; whilst within was found red clay, and burnt bones.

There have been found also, in various of the Tumuli in the Orkneys,* silver fibulæ ; combs ; knives ; pieces of swords ; and bones of dogs, or other animals ; a spoon ; a cup ; a gold ring ; and beads. From all which circumstances, fully considered, we cannot but conclude these *Tumuli* to have been of very high antiquity ; and to have been indeed the very Sepulchres of the most aboriginal settlers in those islands ; notwithstanding what has been conjectured concerning their being merely Roman, or Danish. And we may form this conclusion, the rather ; because, in the one instance in the Orkneys, † where a skeleton was actually found with a *Danish axe*, as well as with a sword lying by it : the grave there was of a quite different kind from these ; being made merely just under the sand, in the Links of Tranabie. And we may remember, that in a similar manner, in Kent, there are also graves in the sand, at Ash, near Richborough, very different from those under the adjacent Barrows, and Tumuli.

It may seem tedious to proceed with any further enumeration. But almost every instance that can be named of *Barrows*, which have been actually examined, corresponds so completely with the ideas here conveyed, that I cannot but mention a few others.

Near Sandford, in Westmoreland, and not far from the Roman road, are four *Tumuli* ; the largest 91 paces in circumference ; the second 86 ; the third about 40 ; and the last, a small one almost defaced. ‡ They have, by some, been suspected to be Roman, because of their proximity to the celebrated road constructed by that people, called the *Maiden way* ; but on inspection of the contents of the largest, we must, I think, form a very different conclusion.

This largest, which is about 90 feet in diameter, was cut through in 1766 ; when, half a yard below the summit, was found a small urn, in a larger, containing a few white ashes : and a little deeper lay a sword, 2 feet long, and $2\frac{1}{2}$ inches broad ; and the haft $3\frac{1}{4}$ inches, with an hilt most curiously carved. There were also the

* Gough's Camden, Vol. III. p. 725.

† Wallace, p. 57.

‡ Burn, Vol. I. p. 610.—Gough's Camden, Vol. III. p. 159.

heads of two spears; the fragments as was supposed of an helmet; and the umbo of a shield. And below these, under a great heap of stones, 18 or 20 feet in diameter, piled up conically, was a square place, about 4 feet by 2, containing rich black mould, and many human bones, that appeared to have been burnt. This last was evidently the *Kistvaen*, or *Tomb*; and, as well as all the rest, leads us to conceive the whole to have been British.—But nothing does so more fully, than the kind of armour discovered; which has therefore been the more particularly described. The great broad sword, (instead of the short one of the Romans,) and the two spears, are exactly the arms of an old Briton, according to the best ideas we can form.

In like manner, on opening a great Barrow at Ellenborough, in Cumberland; which, from its neighbourhood to so many undoubted Roman antiquities, has been called a *Roman Barrow*;* nothing really Roman was found in it: and the whole appearance, to the best of my apprehensions, shews it to have been really British.

It is situated indeed only about 63 paces from the Roman camp. That circumstance, however, is no proof that it did not exist *prior* to the Roman camp itself. On the contrary, it is rather an indication, that this station (like many others of the Romans in this Island,) had been an aboriginal British post, long before those invaders and conquerors took possession of it. Every circumstance almost belonging to this Barrow leads us to this conclusion. It is placed on the edge of a very high bank, which overhangs towards the sea, in an elevated conspicuous situation, similar to that of many of the most antient Barrows, both in Asia, and in this Island. It is by old tradition, in the neighbouring country, called *the King's burying place*: (which much rather imports its connection with the antient Britons, than with the Romans.) It is of considerable dimensions; being at least 250 feet in circumference; 42 feet on the slope, from the verge to the summit; and at least 14 feet in its perpendicular altitude. And, on examining it from the surface to the bottom, nothing Roman appeared. There was first a stratum of soft earth, covering the whole, in every part, from the base to the top of the

* *Archaeologia*, Vol. II. p. 54.

Barrow; then a mass of stiff unctuous blue clay, intermixed with fern roots; which formed the greater part of the Barrow, and had manifestly been brought from the sea side; and, near the centre of the whole, were found three or four strata of clods; many of which had the grassy sides placed together, and retained the moss fresh; and which covered wood ashes, mixed with some remains of the bones of an ox; all of which remains appeared to have been placed originally, merely on the surface of the ground, exactly corresponding with the surface of that all around. So that here seems to have been, previous to the construction of this Barrow, a great funeral pyre; (somewhat like that of Patroclus,) and the bodies of oxen, and possibly of other animals, seem to have been burnt together with the remains of the deceased, to whose memory this Barrow was raised.

Again; on opening a Barrow, on Middleton Moor, in Derbyshire, in 1788, the contents had much appearance of being Druidical;* as might indeed be expected, from the nearness of the situation of this Tumulus to Druidical remains of another kind: it being not above half a mile from the Arbelows.

We may therefore fairly conclude those Barrows to have been most unquestionably, in like manner, British, and even Druidical, which are found in the neighbourhood of that curious unfinished Rocking Stone, at Aggleston, in the Isle of Purbeck. On one of which was placed a stone, now thrown down, 10 feet by 8.†

And indeed there would be no end of enumerating those many Tumuli, concerning which, we can hardly avoid forming the same conclusion; such as the Barrows on the South Downs, in Sussex; ‡ some of which are large, and scattered singly here and there; some smaller, and a great many near together; most of them indeed round, with a trench inclosing the basis, and a circular cavity on their top; (the contents of one of which has been described;) but some few of them of the long kind; the longest of all, being one that has been already mentioned, as situated on an hill near Aldfriston, and above 130 feet in length, from north to south.

* *Archaeologia*, Vol. IX. p. 189.

† Mentioned in the *Gentleman's Magazine* for 1767, p. 170.

‡ *Ibid.* for 1768, p. 234.

The Barrows on Chatham Downs, in Kent,* which indeed have been justly suspected, by former Antiquaries, to have been those of Britons; because no truly Roman remains were ever found in any of them; and which have been manifestly shewn, in these pages, to have been, in truth, British, by certain peculiar ornaments discovered therein; are fully and curiously described by Mr. Douglas, in the *Nenia*. †

The Barrows on Blackheath, ‡ (notwithstanding the conjectures concerning their being Danish;) have by late investigations appeared to have been British, § of the later ages;

The Barrows on Dartford Brent, || so near to the ancient curious British pits;

The Barrows on Greensted Green; **—that on Sandown field, near Green street; ††

That on *Shottenton* hill, between Faversham and Chilham, in Kent; †††

Those also, in the Island of Shepey, §§ (which have surely too hastily been supposed to be Danish,) may all, in reality, most justly be deemed British.

And they may, indeed, the more certainly be concluded not to have been Roman; because (in addition to what has been observed concerning the very different appearance of truly Roman Sepulchres, in other instances), there is such a striking dissimilarity, in the real Roman burial ground, in the adjacent county, near Newington, ||| on *Keycol* Hill; where such an immense number of urns, and of remains of Roman interments, have been found.

And consistently with the idea of all these Tumuli being British, we find, that in Cornwall, to which part of the Island so many of

* Hasted's History of Kent, Vol. III. p. 154.

† See the *Nenia*, in various parts throughout; in parts too numerous for me here to refer to the particular pages.—This curious work contains such a particular and exact account of these kind of Barrows, and of their contents, that I can only wish to refer the inquisitive reader to the whole work itself, as the best illustration and confirmation of all the conclusions formed in these observations; notwithstanding my differing a little from the author in some few points.

‡ Hasted's History of Kent, Vol. I. p. 14. 27.

§ See *Nenia*, p. 56.

|| Hasted's History of Kent, Vol. I. p. 226.

** *Ibid.* Vol. I. p. 249.

†† *Ibid.* Vol. II. p. 684.

‡‡ *Ibid.* Vol. III.

p. 25.

§§ *Ibid.* Vol. II. p. 646.

||| *Ibid.* Vol. II. p. 561.

the Britons retired, in order to secure themselves finally from the Roman arms, Barrows of a very similar kind do (as we might expect) exceedingly abound.

On St. Austle Downs there are many ; which lie sometimes two, three, or even seven, in a straight line.* And, indeed, they are found dispersed on almost every plain in that country ; as well as on the tops of hills. †

On opening one, in 1751, in a field at Trelowarren, which was constructed of earth, (very wide in circumference, but only about 5 feet high,) as the workmen came to the middle of the Barrow, they found a parcel of stones, set in some order ; which being removed, discovered a *Kistvaen*, or cavity, about 2 feet diameter, and of equal height, inclosing bones of all sorts, intermixed with wood ashes. This was surrounded and covered with stones. And at the distance of a few feet, were found two urns ; one on each side, with their mouths turned downwards, and small bones and ashes under them. All the black vegetable mould, which covered the place where the urns were found, had been industriously cleared off, and the urns were inverted, on the clean yellow clay, which, in the adjacent field, lies immediately under the soil. ‡ Three thin bits of brass were also found, near the middle of the Barrow, which seemed to have been pieces of a sword.

On opening some others, in the Scilly Islands, they appeared manifestly to have been designed, each of them, for the reception of *a family* ; although neither bones, nor urns, but only an unctuous cadaverous earth, was now found in them.

They contained large *Kistvaens*, or Cavities, formed of rough stones : whilst the edges of the Barrows were surrounded with large stones.

And one of these in particular had a large cavity formed in the midst of it, 22 feet in length ; 4 feet 10 inches high ; and 4 feet 8 inches wide ; having a regular passage into it, at the eastern end, 1 foot 8 inches wide. § The whole therefore of this, much resembled some of those galleries that have before been described under Barrows ; except that this was found filled with earth ; and that, if the person who examined it was not deceived in his observation,

* Borlase, p. 217. † Ibid. p. 211. ‡ Ibid. p. 214. § Ibid. p. 220.

there was an appearance even of masonry, and mortar ; a circumstance that would induce us to think it was one of the latest constructions of this kind of interments.

Can any one then, who reflects upon the exceeding great similarity that appears, upon the whole, in the contents of all the Barrows that have been thus examined, (so different from any thing that can, in any instance, be ascertained to have been either Saxon, or Danish, or Roman,) at all doubt any longer, whether the generality of these Sepulchral Tumuli were, or were not British ?

Surely therefore we must differ from Dr. Borlase in opinion, and presume to say, that no further observations need be added, to convince us that the persons, whose memory was intended to be had in honour, by the construction of almost all the Barrows we meet with, in this country, were, nearly in every instance, the *antient Britons* ; and not, either *Romans*, or *Danes*, or *Saxons*.

There are, indeed, a few Barrows, of later ages, thrown up after battles ; which therefore may be called *Battle Barrows* ; but they are easily to be distinguished, by the *vast number* of bones they contain ; and by the very different manner in which the bodies are placed in them. And that they are not very numerous ; nor a *necessary* appendage to fields of battle, we may be assured, because there are so many antient fields of battle mentioned on record, near none of which are any Barrows to be found : which would not have been the case, were Barrows rightly concluded to be in general connected with such scenes of slaughter.

Amongst these *Battle Barrows*, we cannot forget, that *three* were raised even on the field of Culloden,* no longer ago than the year 1746. Such, however, cannot possibly mislead or deceive the curious.

Neither could those two much more antient Barrows, in the Isle of Thanet, on the coast of Kent, called *Hackingdon Banks*, which seem to have been raised over Saxons, and Danish invaders, slain in one of the violent irruptions of those Northern pirates, at all deceive the cautious Antiquarian in any age. In 1741 they were opened ; and many bones, and skulls of men, women, and chil-

* Gough's Camden, Vol. III. p. 430.

dren, were found; some just under the surface; others in the solid chalk; where the bodies appeared to have been put in, neck and heels together.* A deep trench having been dug in the middle, and the bodies flung in on each side.

So in a Barrow, in a parish called *Barrow*, in Suffolk, the vast number of bones discovered (by means of carrying a turnpike road through it),† and which have been continually discovered by further digging, render it incapable of being mistaken for a British Barrow; and plainly point out the difference between a *Battle Barrow*, and a *British Barrow*.

And, as the multitude of bones found under *Battle Barrows* of earth, shew *their* origin; so similar appearances, in certain places, under other Barrows, or Cairns of Stone, speak the same language, and plainly enough, exclusive of the low appearance of their outward form, distinguish them also from the more numerous real British Cairns.

In the village of Wardlow, near Ashford, in Derbyshire, was an odd Cairn, or Stone Barrow, 32 yards in diameter, and about 5 feet high; on opening which, in 1759, for the purpose of making a turnpike road, it was found to have been reared over the bodies of more than seventeen persons, who had been there interred at the same time.‡ The bodies appeared to have been laid on the surface of the ground, on long flat stones, 7½ feet long, and their heads and breasts protected from the incumbent weight of stones, by small walls (or rather chests) raised round them, with a flat stone on the top; excepting the two principal ones, which were completely inclosed in two stone chests, about 2 feet high, and 7 feet long.§

Somewhat similar to this, was one near Raisgill, in Westmoreland; 100 yards in circumference, and about 3 high; composed of loose stones, and covering a large stone, supported by one other on each side, under which was a human skeleton, having the bones of several others round about it.||

* There is an account of this in Gough's Camden, Vol. I. p. 240.

† Ibid. Vol. II. p. 52.

‡ As the remains of these seventeen were found only in the half part of the Cairn that was examined, after it began to be attended to, it is probable the whole number was at least thirty-four.

§ Bray's Tour in Derbyshire, p. 134. 2d ed.—Philos. Trans. Vol. LII. Part 2. p. 544.

|| Burn, Vol. I. p. 481. 492.—Gough's Camden, Vol. III. p. 156.

And of this kind seems to have been the low Barrow situated in the Manor of Crosby Garrot, in the county of Westmoreland, in a common pasture called Bullflat, under an hill. It probably contains the remains of *officers* slain in some battle in the time of the early deadly feuds; but long after the age of the first British Caledonians. And its æra, seems to be pointed out, both by the peculiarity of a wound in one of the skeletons; and may also be inferred, from there being no remains of beads, or weapons found, though the bones were not much decayed.

The whole Barrow was about 10 yards in circumference, or nearly 10 feet in diameter; and not much above 4 feet in height. And upon opening it, in 1792, there were found six bodies placed on the ground, in Kistvaens, or a sort of stone coffins, made of slates common in that country. The bottoms of each consisted of two or three stones *well joined*; and the sides had each from two to four stones placed a little obliquely; over which were laid stones similar to those of the sides, whose edges projected about an inch every way. Upon these six coffins, earth and stones had been thrown about 6 inches higher: and then four more such coffins were placed at the top, and covered with about 2 feet more of earth and stones. There was no sort of cement used throughout: but around the whole were placed, in a circle, a number of flat stones edgeways, with their tops but just appearing above the ground.*

Two other such mounds are seen on the summit of the adjacent hill; and may very well be deemed to have contained the bodies of other persons slain at the same time.

And as the contents thus distinguish *Battle Barrows*, so they are sometimes pointed out by precise traditions, or names.

Thus we may be led to suspect some of the Barrows at least, near *Battle Hill Causeway*, † in Hampshire, to have been *Battle Barrows*.

And, with Dr. Plott, ‡ may venture to allow that a Barrow in

* There is an account of this Barrow in Vol. LXIII. of the Gentleman's Magazine, p. 116.

† *Archæologia*, Vol. VIII. p. 91.

‡ Plott's *Staffordshire*, p. 415.—In other respects, and with regard to other Barrows in general, I have ventured to differ greatly from Doctor Plott's ideas, as to their origin;—as

South Low-field, Staffordshire, might be raised over persons slain in the bloody battle fought between Edward the elder, and the Danes, about 911; though so very few Barrows appear in reality, on examination, to have been raised either by the Saxons, or the Danes, any more than by the modern English; who yet raised those at *Culloden*.

It is improper to quit all mention of Barrows, without just adding, that at Biggar, in Teifidale, in Scotland, there is one of a most remarkable kind, different from all others, and of a very beautiful external appearance; being a *square Tumulus*, measuring 486 feet at the base, and 40 feet in sloping height.* This, however, is only thus mentioned, on account of its great singularity.

Here, therefore, the investigation of the history of these curious and most antient repositories of the dead may fairly be closed. They are indeed the simplest works of art; scarce deserving to be named, as having any connection with the efforts of human genius, in its labours to produce works of architecture. But they are so interesting, both on account of their close connection with the sad general lot of human nature; and with the manners and customs of the primæval people, in all nations, even before the existence of the pyramids in Egypt, (to the formation of which, such kind of rude Sepulchres probably gave the first idea,) that it would most surely have been a total want of due attention to the first causes of inventions of architecture, not to have considered them maturely.

It is almost impossible to behold these laboured memorials of the dead of antient days, without bringing present to the imagination those multitudes of people, who contributed their efforts to raise these magnificent high mounds:—in some instances lamenting, with kind affection, their patron, protector, munificent benefactor, and friend; and wishing the accumulation of earth to be an everlasting testimony of the accumulation of their gratitude, and good will, and reverence:—in other instances, cursing in the bitterness of their hearts, the dire servitude that imposed upon them so heavy a

will appear to any one who peruses his observations in his History of Staffordshire, from p. 402 to 415; and in his History of Oxfordshire, from p. 322 to 327.

* Gough's Camden, Vol. III. p. 299.

task ;—and saying, with poignant anguish, what our Poet said in a burlesque humour, on another occasion ;

Lay heavy on him earth, for he
Laid many an heavy load on thee.

The great tremendous day, which shall disclose the secrets of all hearts, and bring every work and thought into judgment, according to the light, and knowledge, and opportunities, which every man had, will shew, *who* amongst these illustrious dead deserved any lasting memorial ; and *who* amongst them had reason to wish, that no memorial of their deeds should ever exist ; and that even the labour of raising these nameless mounds had been spared.*

May the ashes of those, whose tombs we have thus been considering, as far as is now possible remain in peace.—Their identical persons, we cannot but be persuaded, are out of the reach of being affected by that violation of their graves, which has brought to light the facts we have been recording :—but surely, though we record those facts, we ought yet to say, that such violation can never be heartily approved.—And indeed it must often have occurred to the mind of every curious observer, that the knowledge obtained thereby, is in truth, very little more than might have been investigated, from other modes of information, without any such violation at all.

* Whilst we are considering these kind of interments in cells, or chambers, under Barrows, or Pyramids ; and under conical rude vaulted domes, it is somewhat interesting to bear in mind the manner in which the Emperor Charlemagne, was buried ; as that was plainly with some sort of reference to this kind of memorial and respect, long after the use and custom of rearing rude Barrows had ceased.

The body of Charlemagne was deposited in a vault, directly under the middle of the dome of the octagon Church at Aix la Chapelle, (a noble substitute, in ages of art and civilization, to the rude Barrow, or to the but little more artificial pyramid.) It was placed, in the imperial robes, in a chair, composed of pieces of white marble joined together ; and was covered with gold. It had a crown on its head, now kept at Nuremberg ; and the book of the Gospel in his hand ; which is said to be still preserved in the sacristy of the church. There was a cutlass, or sword, hung to his side ; on the scabbard of which are ornaments of silver gilt ; and a drinking horn, formed of an elephant's tooth, is likewise understood to have been hung about the body. But the bones are now removed, and interred under the high altar. ||

|| Poccocke's Travels, Vol. II. Part 2. p. 222.

All the conclusions, therefore, formed in these pages, in consequence of bringing the whole of the evidence arising from such researches into one point of view, it is to be hoped may rather become a means of inducing those who shall come after these times, to abstain from such fruitless curiosity; than a means of exciting them to such barbarous intrusion, so contrary to those ideas, respecting the ashes of the dead, that have been held sacred through all ages.

I record all these facts as I find them related:—but it is with an earnest wish to put a stop to such unprofitable disturbance of Sepulchres.

The reflection made by one of the inquisitive investigators of these matters, who was more cautious than usual, deserves to be considered in a stronger light, than as a mere slight remark;—“that a kind of respectful veneration seemed naturally to inspire even the ignorant rustic, during the operation of searching the contents of a Barrow.”

The persons whose remains have thus been explored, and disturbed, were in their day (at least many of them), dear to many:—sometimes the objects of veneration; and deeply lamented:—and the very structures and heaps we have been examining, were raised on purpose to prevent their ashes from being disturbed;—and to maintain respect, and honour to their memory.—So short-sighted is man!—and of so little avails all his care!

Yet let all, at least, reap this profit.—Let every one remember the case of these departed inhabitants of the earth may be his own. And whatever mock importance any one may fancy himself to be of now; let him reflect that it will all be done away; and no trace be left behind:—no not so much as the traces of these unknown British aboriginal possessors of this Island.—Let us therefore look further; and beyond this dismal scene; where better science will lead the way.

Of *these*, whoever they were, whose bodies are now mouldered and gone; as far as any of them were sincere and upright; we may surely say, and hope, there is still much good for them in store; more than a recompence for the violation that has been committed with regard to their ashes.

Of the rest; the great plunderers, and savage oppressors of the

ages in which they lived; we may say, in the sublime language of the Prophet *Ezekiel*,* concerning those lawless conquerors in the East, many of whom had actually been interred just in the manner we have been describing.

“*They are gone down to the grave with their weapons of war; and they have laid their swords under their heads; but their iniquities shall be upon their bones, though they were the terror of the mighty in the land of the living.*”

* *Ezekiel*, chap. xxxii. ver. 27.

For the sake of shewing, with the greater accuracy, the characteristic difference of appearance between the *Great Barrow*, and the *Hill Fortress*; Pl. $\frac{xx}{9}$ is here added; which represents a view of *Silbury Hill*, as seen on the east side, at a distance, on approaching it from Marlborough.—And in the same view are seen on the right hand, as appearing in the horizon, six of the smaller kind of Barrows, such as are so frequent in all the surrounding neighbourhood of *Abury*, and *Stone-Henge*.—Two more, further distant, are seen at (*b*); and one other, still further distant, at (*c*).

Pl. $\frac{xxi}{9}$ also represents *Silbury Hill* seen near;—on the south-west side;—in which view the church of *Abury* appears, on the left hand, at the distance of about a mile. And though there have been winding paths made to ascend the summit of this great Barrow, on account of a sort of fair, which is now kept upon it annually; and other cuts have been made upon it; some of which are shewn in this view: yet its exceeding different appearance from that of an Hill Fortress is most discernible.

The precise different forms of small *Low Barrows*, will also be better understood, by the addition of Pl. $\frac{xxii}{4}$, the outlines of the sketches in which are most cautiously exact.

Fig. 1. represents four of those kind of Barrows, as seen on the Downs, as you approach *Silbury*, on the other side from the *Devizes*; and which are between five and six miles from the *Devizes*.—Their different forms (for they are all four different), may help very much to illustrate the appearance of those many others which are in the neighbourhood of *Stone-Henge*; and even the appearance of some of those very small ones near *Addington*, in *Surrey*.

Fig. 2. shews two more, that are a little beyond the turnpike; about five miles from the *Devizes*, going towards *Silbury*.

Fig. 3. three more; that are seen a little further on, upon the same road.—And,

Fig. 4. three more; that are still nearer to *Silbury*, and larger than those first described.

Fig. 5. represents the King's Down Barrows, as they now appear; which are about seven miles from Bath, on the road to the Devizes.

Fig. 6 and 7. represent two different views of the three remarkable Barrows, on *Three Barrow Hill*, in the parish of Farnbury, in Somersetshire, as seen from the road near Clutton.—The Barrow on the left being called *Blackberry*, and being that near Ouzel.



Silbury Hill, as seen on the East Side.

Published by the Society for the Diffusion of Useful Knowledge.

J. Smith.

1837.



Silbury Hill as seen on the S. W. side.

Engraved by J. G. Thompson. 1848.

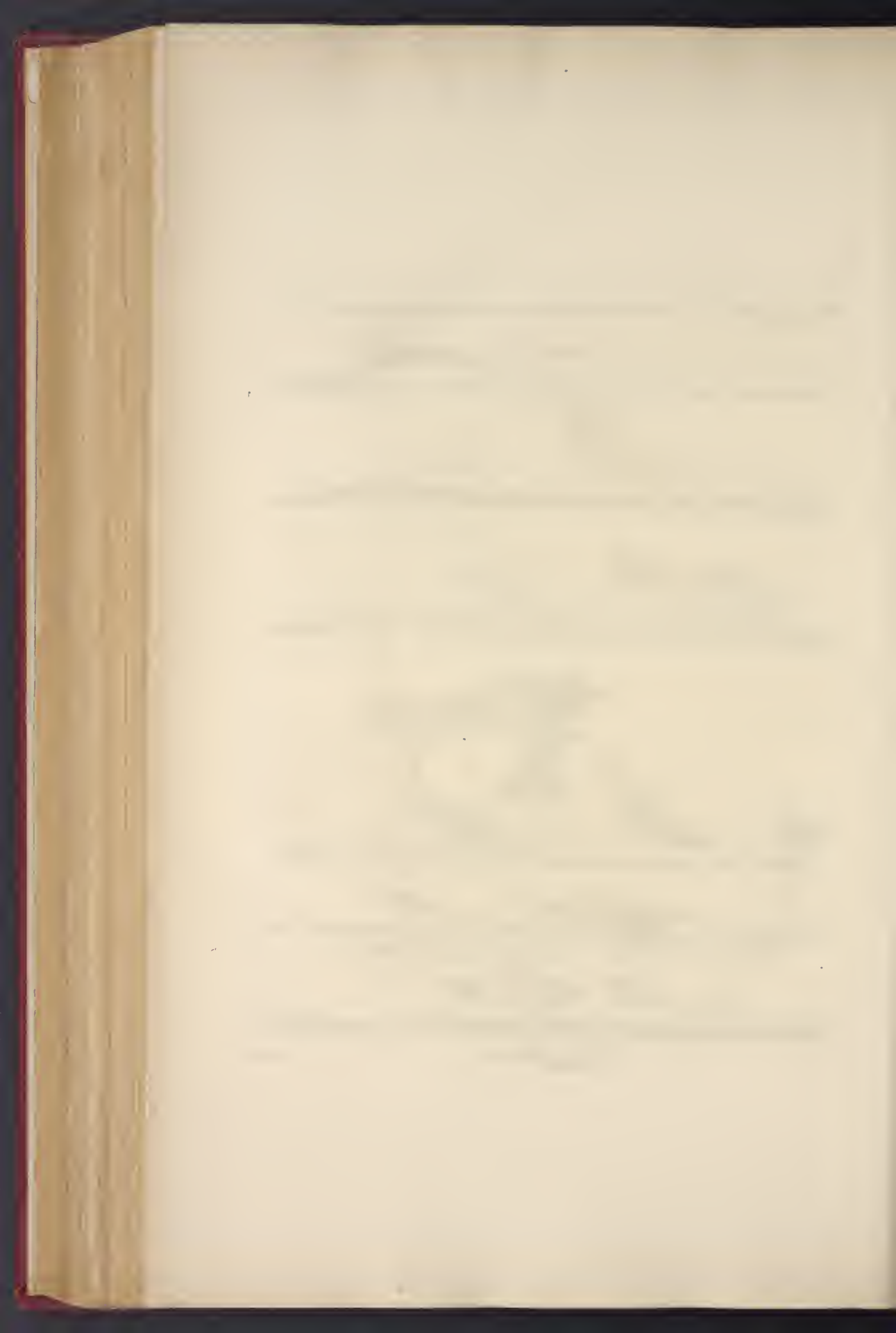


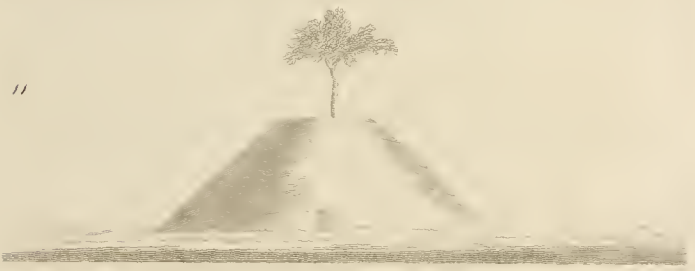
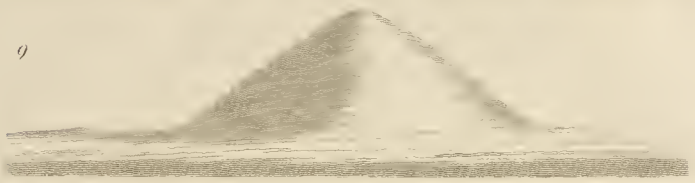


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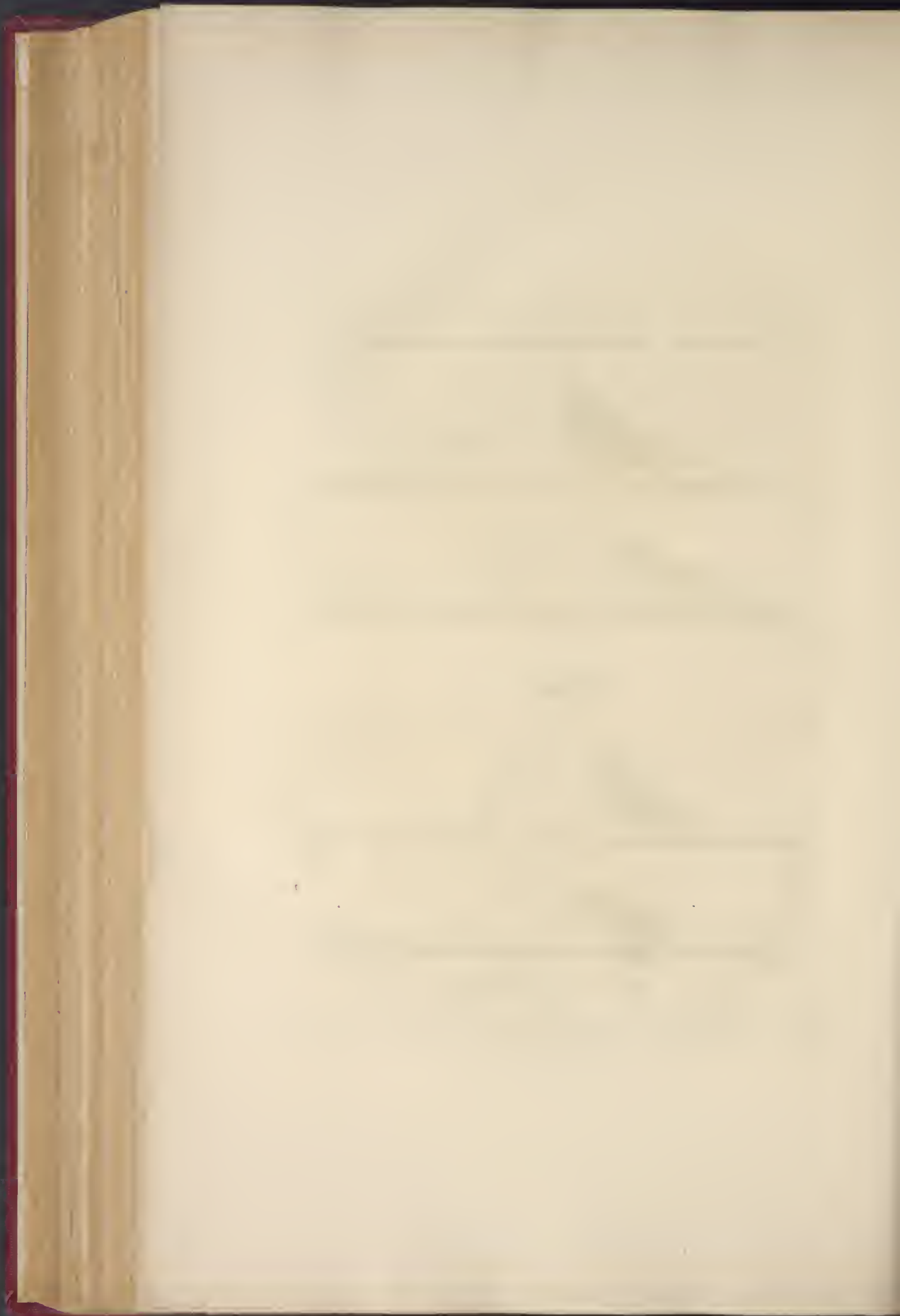
J. Smith sc.

Low Barrens.





Variety of Barrows.



For the sake of shewing the varieties of Barrows still more clearly. Pl. $\frac{xii}{5}$, is added ; in which

Fig. 8. represents the five *Overton Barrows*, near Silbury ; as seen at a distance, on the road leading from Marlborough towards Silbury Hill.

And fig. 9. shews more exactly the form of that marked (*b*), as seen quite near. It being that which is nearest to the road, on the right hand ; and which measures about 35 feet, on the slope every way.

Fig. 10. represents, on a much smaller scale, the Long Barrow at *Beckhampton*, which is within sight of Silbury Hill ; and which, on measuring, I found to be at least 190 feet in length ; and 90 feet in breadth ; though some part of it has been taken away, and it has been much mangled.

Fig. 11. represents a Barrow, on the left hand of the road from Wells to Bath, near Radstock ; about six or seven miles from Bath. And at the bottom is marked the place where an attempt has been made to open it.

Fig. 12. represents a Barrow, on the right hand of the road from Bristol to Wells ; about five or six miles from Wells.



CHAPTER VII.

CONCERNING LOGAN, OR ROCKING STONES; AND CONCERNING TOLMEN,
AND BASON STONES.

WITH regard to the Logan, or Rocking Stones; and concerning the Tolmen; and the Bason Stones; it is almost impossible now to add any satisfactory remarks, or to say any thing further than that such remains do exist.

They were, in all probability, the instruments of superstition in some shape or other; the memorial whereof is well buried in everlasting oblivion.

They appear obviously, however, to have been works of art.—And because no one circumstance occurs that can induce us to suspect that any of them were the works either of Saxons, or Danes, or Romans, we must consider them as being solely the works of the Britons: to which conclusion we are also led by their massy resemblance to other stupendous Druidical Remains; and by their proximity to them in point of situation.

But whether the Rocking Stones were used *for divination*; as our poet Mason has finely imagined; and as Toland also thought;—or whether they were idols;—or else fraudulent means of imposing upon the vulgar, a pretended *divine assent* on certain occasions:—and whether the Rock Basons were for preserving lustral water, or the blood of victims; or for containing libations; or for any other purpose:—and what was the precise design of those vast masses of insulated Rocks, which have indeed some marks of the tool; and of those that are called Tolmen, must be left to mere conjecture; as we have no records, or clear facts to be compared together, that can illustrate this matter.

All that can be done, by way of explaining this species of British art and contrivance, is merely to shew *how*, and *where*, they exist; and by what means they seem to have been formed. And in

general to remark, that as they are masses of rock, *on which tools certainly have been lifted up*; therefore they are unquestionably of the *later ages* of Druidism; when much corruption, and the grossest species of abominable superstition, had been introduced; and are on that very account the more inexplicable, because there was nothing in the primitive patriarchal times, with which *they* can now be compared.

We are not, however, altogether without notices of something similar in the East; because Pliny tells* us, that near Harpasa, a town in Asia, is a most stupendous Rock, easily moved with one finger; but which cannot be removed, or made to stir from its place, if you thrust at it with your whole body.

And, in like manner, Ptolemy† speaks of a mass of Rock, called *the Gygonian Stone*, near the ocean, which may be *moved* with the stalk of an asphodel; but cannot be *removed* by any force.

Many of those that existed in our own country, are still well known. And a very few descriptions, with one or two representations, will sufficiently convey the idea of their form.

Near Halifax, in Yorkshire, at a place called *Golcar Hill*, is a stone about 10½ feet long; 9 feet 4 or 5 inches broad; and 5 feet 3 inches thick; ‡ which is placed on so small a centre, that at one particular point a man may cause it to rock without much trouble, though it has been somewhat damaged in this respect, by some ignorant masons, who endeavoured, of late years, to discover the principle on which so large a weight was made formerly to move so easily.

It is represented, Pl. XIII. fig. 1, from a drawing annexed to the account of it in the *Archaeologia*; where it is with much ingenuity observed, that the very name of the place, from some affinity in sound to a Saxon word, seems to indicate that this place was appropriated originally to the purpose of divination, or enchantment;—but on such kind of derivation, in consequence of the similarity of the sound of words, no great stress is to be laid.

There is also another mass of rock, at Rishworth, in the same county, consisting of vast fragments piled one above another to the

* Plinii Nat. Histor. lib. ii. sec. 98.

† Lib. iii. c. 3.

‡ *Archaeologia*, Vol. II. p. 353, 354.

height of several yards, and standing on a small narrow base; which mass is still called the Rocking Stone, on account of a constant tradition that it was formerly easily moved; but it has lost that power at present.*

Very similar to the Rocking Stone of Golcar, (at least sufficiently so to prove the similarity of ideas and customs that prevailed in parts of this Island very remote from each other,) is the remarkable Rocking Stone in Cornwall, called the *Great Quoit*, on *Karn-le-hau*, in the parish of Tywidnek. Borlase was convinced,† it was raised and placed in its situation by means of human force, and art. But whether that fact was so or no; certain it is that art, and the tool, must have been used to bring it to its exact equilibrium.—It is as well poised as if placed by the most skilful artist; and yet is 39 feet in girt, and 4 feet thick.

There is also another very large stone, in a very elevated situation, on an high promontory, called Castle Treryn, in the parish of St. Levin, on the coast of Cornwall,‡ which is so evenly poised that any hand may move it to and fro.

And there is a still more remarkable stone, on the island of St. Agnes, in Scilly. It stands on an under rock, which is 10 feet 6 inches high, and 47 feet in circumference; and which itself touches the ground with no more than half of its base. And the Rocking Stone itself rests thereupon, on one point only, so poised, that two or three men, with a pole, can move it. It is 47 feet in girt, and 8 feet 6 inches high; and has on the top a large Rock Bason, near 4 feet in diameter, and 3 feet deep; and the whole stone is of a very globular form, appearing to have been rounded by art.§

Of a kind not very unlike the *Golcar* stone, in its construction, and in the mode of its being poised, was the famous stone called *Men-amber*, in the parish of Sithney, in Cornwall; which was so

* There is a representation of it, in the *Archæologia*, Vol. II. p. 360. Pl. XXIII. fig. 5.

† See Borlase's *Antiquities of Cornwall*, p. 180; and Pl. XI. fig. 5.

‡ *Ibid.* p. 180.

§ It is described, and represented by Borlase, in his *Antiquities*, p. 181 and 173. Pl. XI. fig. 4; for which reason I do not represent it here; although, to elucidate this account, I am unavoidably obliged to copy some few of his, and of other persons' representations; or at least to represent the same things over again; when it would be injustice not to mention and acknowledge the authority of the accounts previously given.

nicely poised, that a little child might move it; but in the time of Cromwell, was with immense labour and pains thrown down, in order to put an end to the superstitious regard that was fancied to be still paid to it.

It is represented, in its fallen state, Pl. XIII. fig. 2.—The originally Rocking, or Top Stone, is 6 feet wide from C to D. But its greater length was in the contrary direction, from east to west; and was 11 feet. And its thickness, from E to F, was 4 feet.—And there are evident marks of the tool, upon the surface, whereby it has been wrought into a wavy plane.—There was no Rock Bason on this stone itself; but there is one near the edge of the stone B, on which it was poised;—and it may be observed, that a part of this under stone was cut, and hewn away, in order to fling the upper Rocking Stone down into its present position.

An artificial bank of Stones adjoining, seems to have been designed as a causeway, or means of access to move the stone; * and the whole of the fabric has marks of an age later than the early periods of Druidism.

On a mountain betwixt Knaresborough and Shipton, in Yorkshire, is a Stone, of irregular form, which may be computed to weigh near twenty tons; and which is so nicely poised, as to be moved with ease by one hand. And near this, † on the highest parts of one of the adjacent rocks, is a smooth regular well wrought Bason, formed out of the solid stone; 2 feet in depth, and $3\frac{1}{2}$ feet in diameter; ‡ having also, on each side, a smaller bason, formed each on a prominent point of the rock.

Not far from Warton Crag, in Lancashire, which has been already mentioned as a British fortress; and also near a number of Barrows, or Tumuli, which there is every reason to believe belonged to Britons; are no less than three Rocking Stones, placed in a line at equal distances, about 40 feet asunder.—The centre stone is the

* This drawing is borrowed from Borlase's Antiquities, p. 173. Pl. XI. fig. 5.; and see p. 181.

† See an account given in the Gentleman's Magazine, Vol. LV. p. 360.

‡ It is impossible, when one sees these kind of Basons, not to harbour a suspicion that they were exactly of the same age (though for a different purpose) with those found in the great Barrow at New Grange, in Ireland.



F2.



*A Rocking Stone near Halifax, in Yorkshire, on Golear Hill,
and another in Cornwall.*



largest; being at least 30 feet in circumference, and near 8 in height. These stones have manifestly, by much art and contrivance, been converted into Rocking Stones, by having their under sides broken off and hewn away,* till they were brought to rest on a very narrow basis. And, what is very remarkable, in this instance, there are, a little lower down the hill, on another ridge of rock, three other Rocking Stones in a line, but not at equal distances. Which seems to indicate that they formed such curious moving bodies only in the spots where they could previously find natural rocks nearly fit for the purpose. These last Rocking Stones are smaller than the others: and there are several Rock Basons near them.

At no great distance from these; on Silverdale Common, was another Rocking Stone, 37 feet in circumference, and 10 feet in height, placed originally on the brow of a large hill: but this has been thrown off its equipoise; and moves no longer.†

A Rocking Stone is described also, by Major Rooke, as existing on Hathersage Moor, in the Peak of Derbyshire;‡ 29 feet in circumference: near which is not only one large stone, with a Rock Bason; and many Tumuli, with urns, *beads*, and rings in them, which denote them to be British; but, at the distance of about an hundred yards, there is also another most remarkable Stone, 13½ feet in length; which appears to have been placed, by art, supported by two small stones; and which hangs over a precipice; having on the top of it a large Rock Bason, 4 feet 3 inches in diameter; and close to this, on the south side, an hollow, cut like a chair, with a step to rest the feet upon.—And that this was a scene of Druidical gross superstition, may be very reasonably inferred from the antient constant tradition of the country, calling it *Cair's Chair*.

Not far from this spot are also some Rocking Stones; and of such a kind as seems plainly to indicate to us, like those at Warton Crag, that the first idea of forming Rocking Stones at all, was the appearance of certain stupendous masses, left by natural causes in such a singular situation, by the departure of the waters of the Deluge, as

* There is a representation of them in the *Archaeologia*, Vol. IX. p. 215. Pl. XVI.

† *Archaeologia*, Vol. IX. p. 216.

‡ *Ibid.* Vol. VII. p. 176;

where there are representations of the whole.

to be even prepared, as it were, by the hand of nature, to exhibit such a curious kind of equipoise.

Amongst the Bradley rocks, and not far from Rowter rocks, on Stanton Moor, in Derbyshire, is a great Rocking Stone, 32 feet in circumference, which moves with the greatest ease; being placed, either naturally, or by art, on two stones clear of the ground.* And in the neighbourhood of it, at the distance of about a quarter of a mile, are several Rock Basons.

Amongst the Brimham rocks, in Yorkshire, is a very curious Rocking Stone, 18 feet in length; 4 feet in width; and 6 feet in height; the bottom of which evidently appears to have been cut away, to form *two knobs*, on which it rests, and moves with ease.

For the sake of rendering this matter more intelligible, it is represented, Pl. XIV. fig. 1. from a drawing engraved in the *Archaeologia*; † and it helps in the clearest manner to explain, how several of these stupendous works have been originally constructed.

Amongst these rocks also are other Rocking Stones, and a Tolmen, (or vast mass of rock, supported by two smaller masses, with a passage between them,) and some Rock Basons; there are also, on the stones, evident marks of the tool.

And in this remarkable spot, is particularly one Stone, which appears to be about one hundred tons in weight, and has manifestly been shaped by art, and the tool, to a small knob at the bottom, to give it motion. This motion, however, can be communicated only by touching it in *one certain place*, about the middle of one side; but soon becomes increased to so astonishing a degree, as to cause much apprehension of its falling, as it is placed elevated on a sort of pedestal. But on full examination it is found to be so nicely balanced, that there is no sort of danger. ‡ It looks somewhat like an inverted cone.

The same sort of art is, perhaps, also not less obviously evident, on a very remarkable double Rocking Stone, in the Peak of Derby-

* See *Archaeologia*, Vol. VI. p. 111. Pl. XIII. fig. 4.

† *Ibid.* Vol. VIII. p. 211. Pl. XVI. fig. 3.

‡ See a very curious account of it, by Major Rooke, in the *Archaeologia*, Vol. VIII. p. 211. and Pl. XVI. fig. 5.

shire, called *Robin Hood's Mark*; standing on the edge of an hill, on Ashover Common. For here are found two great upper stones; a sort of parallelepipeds; each about 26 feet in circumference; placed horizontally one upon the other; and resting upon two other tall parallelepiped stones, standing upright side by side: they seem to have been shaped by art, to fit each other: and also to fit exactly with the tops of the two upright stones on which they rest; and are so poised, that the lower stone moves together with the upper stone.*

There are Tumuli at no great distance from the Brimham rocks, in Yorkshire, which concur in pointing out the British origin of all the art that has been used amongst them, to convert these magnificent works of nature, to superstitious purposes.

And this rude art is in no instance more manifest, than in a stupendous pile of rock, or a sort of Rock Pillar, represented Pl. XV. fig. 1.; 46 feet in circumference; and of a great height; resting upon a small irregular pedestal, only 1 foot wide, by 2 feet 7 inches broad.† The whole has been detached from the adjacent rock, probably originally in a degree by some natural convulsion,

* See an exact description, and representation, of them in the *Archæologia*, Vol. XII. p. 43. Pl. V.

† This representation is also borrowed from Major Rooke's curious account of the Brimham Rocks, *Archæologia*, Vol. VIII. p. 212. Pl. XVI. fig. 6. In this first part of these observations, relating to British Antiquities; where the elucidation of truth depends almost solely upon the comparing together a vast number of corresponding Remains of ancient works; it was unavoidably necessary both to make use of the labours and researches of many other persons, and also (in justice to their previous investigations) to copy the representations which they have given, where they are at all faithfully executed.

This, together with the impossibility of viewing with one's own eyes, every thing that is curious in remote parts, is the reason why so many of the specimens, referred to in the beginning of this work, are copied from the works of others.—In the subsequent pages, however, when we come to consider the more refined works and improvements of art, the case will be otherwise; and we shall not stand in need of any such assistance.

Both to avoid increasing the bulk of these Volumes, and to avoid the increase of expence, the engravings here given, by way of illustration, are not more than are unavoidably needful; but, for the sake of science, I could even wish, if it were possible, to have been able to bring into one point of view, copies of all the corresponding Representations of these most interesting and curious Remains, that have, at any time, been given by any persons whatever.—An intelligent mind will easily conceive what a wonderful effect such a collection, and accumulation of proof and demonstration, would produce.

but afterwards more entirely by art; the marks of the tool being still visible in many places, and particularly on the base of the pedestal, which has been shaped into a sort of irregular hexagon.

In the neighbourhood of this, but nearer still to the Tolmen, is another Rocking Stone of a sort of orbicular, or spherical form, like that described by Borlase at St. Agnes, in Scilly.

And amongst the same Brimham rocks, (which having offered so great an opportunity to convert them to superstitious purposes, seem to have been so carefully improved, or rather abused to that end, by the corruptions of the later Druidical times in Britain;) amongst these is found, an apparent vestige of an intended Rocking Stone, never finished.—It has been justly observed, that art seems to have been aiding in the singularity of its position.*

It is represented, Pl. XIV. fig. 2. And a fragment of a Rock Bason, either natural, or artificial, appears, on the right hand, at the top.

Nor are we without other similar instances of obviously intended Rocking Stones, left unfinished; which, together with the remaining appearance of the use of the tool on them, is a proof that they belonged to the *latest ages* of Druidism; even so late, that the whole superstition, by means of foreign invaders, and by the just judgment of God, was put an end to, before these works were finished.

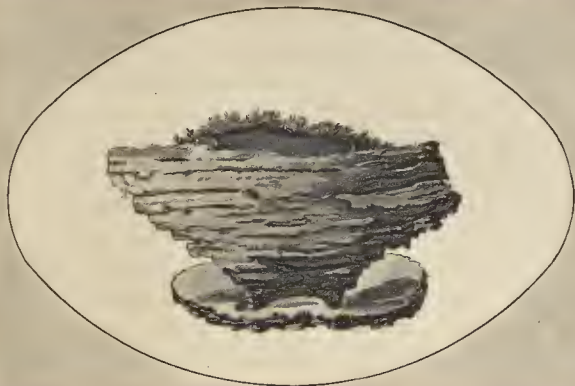
Of this kind is most manifestly that stupendous work in Dorsetshire, standing on the north-east extremity of the Isle of Purbeck, in an heath; and called *Aggleston Stone Barrow*, or the Devil's Night Cap.

It is a prodigious Stone, resembling an inverted truncated cone, 36 feet in the longest diameter of its uplifted base one way; 18 feet in the transverse diameter of the same base, the contrary way; and 18 feet in height.—Its real base, or inverted apex, is 18 feet, in diameter, by 14.

That this vast mass was originally a natural rock no one can, with any good reason, doubt. Neither can any one doubt that it has been altered, and manufactured by art, who either views its form, or

* *Archæologia*, Vol. VIII. p. 215.

F.1.



F.2.



A Stocking Stone, and One left unfinished, at Brimham Rocks.

J.C. Sturtrope sculp.



considers the circle of Stones so artificially placed round its base. It stands on a great mass of rock, like a Barrow; and therefore, as it is called a *Barrow*, (though surely very improperly,) and has such a sort of resemblance, it is represented Pl. XII. fig. 2. in the same plate with a real Barrow; which, though such, has also a more dubious appearance than is usual.

Aggleston Stone has, on its upper surface, three Rock Basins, so large, that from time to time ravens have bred in them. And the surface of the whole Barrow, or rocky hill, on which this vast mass stands, is overgrown with heath. Whilst its diameter, at the top, is 60 feet; and at the bottom, it occupies no less than half an acre, and 14 poles of ground. The slope on the east side, where it is steepest, is 300 feet, and its perpendicular height 90. It plainly appears, therefore, that the drawing, for the sake of being brought within compass, to represent the stone itself the more properly, takes in only a part of the Barrow near the summit.—Even *one* of the stones, that surround the base of this intended Rocking Stone, contains, upon computation, about sixteen tons, and another about nine.*

Round about the basis of this stupendous Remain, on the heath, are several antient real Barrows; a proof of its having been an object of veneration and attention in the days of the Britons; whilst, at the same time, its form, so far altered by the tool, seems plainly to indicate that it was intended to be, at last, with much care and caution converted into a Rocking Stone, † either on two points of rest, like that Pl. XIV. fig. 1.; or on one narrow basis, like that described, p. 331; or like that which seems to have been designed to be so finished, Pl. XIV. fig. 2.

On one of the great Barrows adjoining, stood an upright Stone, 10 feet in height, now thrown down; but much resembling the Stone on the Barrow in Ireland, represented in Pl. XII. fig. 1. And

* See a curious account of this Barrow in the Gentleman's Magazine, Vol. XXXVII. p. 169.

† I cannot, however, forbear observing, that there is now a great cleft from the top of the stone some way downwards; which might perhaps intimidate those who were undertaking the work from completing it, least on narrowing the base, it should fall in two. And this might, perhaps, be one reason why it was thus left unfinished.

therefore much resembling that on the antient Barrow of Ilus, King of Troy.

As Aggleston Stone Barrow, together with the unfinished Rocking Stone amongst the Brimham rocks, seems to have been fitted by natural causes, before it was aided by art, to form the wonderful appearance it now has ; so there are several other instances of a similar kind : amongst which we ought not to forget that stupendous mass at West Hoadley, in Sussex ; whether it ever was destined to superstitious purposes or no.

It is well known by the name of *Great upon Little* ; and is represented, Pl. XV. fig. 2.

It is most fully described in the *Archaeologia* :* where it is justly observed, that whatever might be its destination, yet standing with its stupendous bulk, poised seemingly in a miraculous manner, on a point, one cannot but be struck with amazement on approaching the spot.

It is, in its external figure, nearly a sort of parallelopipedon, whose height is about 20 feet ; and its four irregular sides are, in their respective dimensions, about 14 feet ; 15 feet ; 12 feet ; and 21 feet : but its base, instead of being flat like the sides, projects towards a protuberant sort of point in the middle, on which the whole rests, placed on a similar rising point of the rock underneath.

The operation of natural causes seems to have been aiding in clearing away the earth, or sand and soil, between these two rocks, and in first exposing this wonderful position ; but when one considers how nicely the small base finally left is formed ; and how completely the whole is poised ; it is very difficult not to be induced to believe, that art has also been used :—and such art as might, if persevered in with caution, have converted the whole into a Rocking Stone, similar to those which are to be met with in such different and remote parts of this Island.

A celebrated Rocking Stone was well known in Wales, where so many British antiquities of various kinds are extant. It stood in a very bold situation, on a cliff hanging over the sea, about half a mile from St. David's, in Pembrokeshire. It was mounted as it were,

* *Archaeologia*, Vol. VI. p. 54.; where is also a representation of it, Pl. VI.



F. 2. Insulated Block aided by Art on Surface.



F. 1. Insulated Block aided by Art in Spontaneous.



upon other subjacent strata of stones, about 3 feet high; and so placed, that a man might, with one finger, cause its tremendous swing, from side to side: but the Parliament soldiers in the civil wars, (just as Cromwell's soldiers had done in Cornwall,) considering this stone as an encouragement of superstition, destroyed its equipoise, and rendered it immoveable for ever, as it now remains.* Yet it is perhaps even on that very account the more deserving to have the curious record concerning it preserved; though we do, still more heartily than its destroyers, abhor all impositions of superstition, and every abomination.

There is another in Scotland, which, as far as appears to the eye, seems to have been originally a mere natural production; if it ever was applied to superstitious purposes at all.—It stands near the summit of an high ridge of mountains, called the Kell's Rins, in Galloway. It is above 22 feet in circumference; 8 feet 9 inches in length; and above 5 feet high.†

And to return to our own country, another most surprising fragment of this kind, prepared nearly by the hand of nature, exists near Newland, in Gloucestershire. It is, in figure, very nearly an irregular square inverted pyramid,‡ poised on its point, or apex; which, where it touches the pedestal, is not above 2 feet square, and is said to be moveable. Its height is about 10 feet; its south-east side measures 19 feet 5 inches; its north side 17 feet; its south-west side 8 feet; and its south side 12 feet.—The rock pedestal, on which it stands, is an irregular square: on the south-east 12 feet; on the north 14 feet 9 inches; on the west 21 feet 5 inches; and on the south 14 feet. And at a small distance to the east, is a rock scooped into a kind of bason, with a channel seemingly intended to let out the water, after it is filled to a certain height. Whether this was a work of art, or nature, may be doubtful; but the whole seems to indicate a Druidical superstitious designation.

Very little more needs to be added, to cast all the light *possible* on the antiquities of the Britons, as far as relates to their exertions, of

* Owen's MS. History in Gibson.—Gough's Camden, Vol. II. p. 520.—Description of England, Vol. VII. p. 280.

† See a representation of it in Grose's Antiquities of Scotland, Vol. II. p. 190.

‡ See its representation in the Antiquarian Repertory, Vol. I. p. 112.

such a kind as may be deemed to have any affinity to works of architecture, or to the dawnings of that art.

And we should take great heed of problematical conclusions, concerning such appearances of natural rocks as may be fancied to have had a connection with their superstitions.

Of such appearances they most undoubtedly *sometimes* took advantage; but *not always*.

Some few more, however, of the most singular of these ought to be mentioned.

One amongst the Brimham Rocks in Yorkshire has already been described.

That remarkable one in Cornwall, called the Wringcheese,* mentioned by Borlase, is well known.

And another very remarkable one exists in Yorkshire; on a common, called Saltonstall Moor, in the township of Warley, not far from Halifax.

It is a sort of inverted pyramid, in height about 9 or 10 feet; having its inverted apex placed on a pedestal of Rock, broad at the bottom, but narrow in the middle at top: round which pedestal, and between it and the upper, and adjacent masses of Rock, is a passage which seems to have been the effect of design. This great mass does not rock, but leans and rests with one end, or point, of the upper part of its elevated surface on some vast adjacent stones, piled up one upon another; † between two of which is a pebble of a different *grit*, so placed that it could not possibly be now taken out without breaking, or removing all the Rocks. This might possibly have been effected by the mighty operation of what are called natural causes, at the time of the deluge; but looks more like a work of art; and the idea of its being so is the rather confirmed, by there being some cavities or basons, cut on the top of the great and impending mass.

There is further, in Rishworth township, a remarkable mass, somewhat of the same kind; ‡ but more nearly resembling that amongst the Brimham Rocks, of which a figure has been given.

* Antiquities of Cornwall, Pl. XII. fig. 1. p. 172. † See an account in the Archaeologia, Vol. II. p. 361; with a View of the Rock, Pl. XXIII. fig. 3 and 4.

‡ It is described and represented in the Archaeol. Vol. II. p. 356. Pl. XXIII. fig. 5.

And near Saltonstall Moor is still another Stone, called Robin Hood's Pennystone, of several tons weight, laid upon a massy piece of rock, with a large pebble of different *grit* between them, which is now wedged quite fast.—This again looks like a work of art: and induces a suspicion that the mass was once poised artificially on the pebble, as a Rocking Stone. But the surer conclusion perhaps is; that the wondrous Remains of that dread and most astonishing convulsion of nature, which produced the general deluge, gave occasion to perverse and misguided minds, in the earliest ages of the present race of mankind, to the forming objects of superstitious attention, fit to impose upon the vulgar, by means of these so curiously poised Rocks; instead of leading them properly, to fear and tremble before Him, who hath made all things; in whose hands (as the royal Psalmist expresses it), *are all the corners of the earth.** Who, when it pleased Him, hath, as it were, *turned the earth upside down*: † and *Who taketh up the Isles as a very little thing.* ‡

There was another species of monumental Remains of the general great convulsion, that seems to have been occasioned at the time of the deluge; which is conceived, by the most able investigators of antiquity, to have been converted to the purposes of superstition in the Druidical and British times, equally with the vast piled masses of Rock; and which, it is therefore proper just to mention, on this occasion, before we bid adieu to the consideration of aboriginal British antiquities.

These Remains are what Borlase calls *Tolmen*.—Immense masses of Rock, placed aloft on two subjacent Rocks, (one on each side,) with a free passage between them.

That immense Remain of this kind, in the parish of Constantine, in Cornwall, is well known. §—It is one vast egg-like stone, 33 feet in length; 18 feet in width; and $14\frac{1}{2}$ feet in thickness; and 97 feet in circumference: placed on the points of two natural Rocks, so that a man may creep under it, and between its supporters. And on the surface are several Rock Basons, which are so formed, that most of them may discharge their contents into two principal ones, which lie in the middle of the surface.

* Psalm xciv. ver 4.
ver. 15.

† Isaiah, chap. xxiv. ver. 1.

‡ Ibid. chap. xl.

§ Antiquities of Cornwall, p. 174. Pl. XIII.

There is another of these, on St. Mary's, one of the Scilly Islands, 45 feet in girt, placed nearly in the same manner.

And still another 33 feet in girt, and 24 feet high, in the Island of Northwethel.*

And it may further be remarked, that amongst the high Rocks, about a mile and a half from Tunbridge Wells, there stands, insulated in the plain, a most remarkable fragment of Rock, of an irregular form, at least 18 feet long; and 9 feet in depth or thickness; and above 4 feet wide; which is supported between two other masses of Rock, and upon them, like a ship on the stocks ready to be launched; and under which a person may pass with ease.—It is in short fitted by its natural position, to be classed with Druidical *Tolmen*: but as there are no appearances of Druidical or British Remains adjacent, to lead us to conclude that it was ever regarded in a superstitious light, or attended to by them; so it should be a warning to us, to avoid being hasty in forming conclusions concerning *such* appearances, where there are not concurrent circumstances, to ascertain a truly British, or Druidical designation.

For it must be acknowledged, concerning these kind of insulated Rocks, and *Tolmen*; that antiquaries may have carried their conjectures too far; and have loaded the Druids with the reproach of still more superstition than they were really guilty of, even in the most corrupted times.

Where there are indeed manifest marks of the tool; or where there has obviously been much artificial design, in the position of any stones; we may indeed fairly conclude there was some superstitious or ceremonial purpose; consistently with what we read of their many strange rites, and observances.

But where the Rocks seem entirely formed by natural causes; it is going too far, to conclude always, and uniformly, from their figure alone, that they must have been appropriated to superstitious uses.

There is, amongst those called Harrison's Rocks, about five miles from *Tunbridge Wells*, a very curious Canopy-Rock, almost exactly resembling that which Borlase calls a Druid Seat; and even more

* Antiquities of Cornwall, Pl. XII. fig. 2 and 3.

boldly situated, on the top of a precipice, hanging over a wide extended fertile plain, which would contain a vast auditory: and yet I should very much hesitate to conclude that *this* was ever thought of, or used as a Druid Seat, or Tribunal.

I cannot but wish, therefore, to hasten to the conclusion of remarks concerning such kind of *uncertain* Remains; although a due regard to the observations of so many Antiquaries, and the marks of the tool apparent on some of these masses of Rock, rendered it indispensably necessary to take some notice of them, before we quitted entirely the consideration of the first, and earliest of the British works of art.

And in justice to the observations of those curious Antiquaries who have at all taken notice of these masses of insulated Rock, it ought to be added, that the artificial Rock Basons found on some of them, so closely connected in form, and obvious designation, with those existing at Kambre, in Cornwall (where British Celts,* and British Coins have been dug up,† and where British Circles of Stone, and

* Antiquities of Cornwall, p. 117. 173. 265. 273. 281.

† From an expression of Cæsar's, *Utiuntur aut ære, aut annulis ferreis ad certum pondus examinatis, pro nummo*, (Lib. v. sec. 10. de Bello Gallico,) which has manifestly been misunderstood; it has been sometimes concluded, ‡ that the Britons had no coined money before the invasion, or conquest of the Romans; and that from *them* only they learnt to put rude figures of elephants, and griffons, on their stamp'd coins. But even to omit the consideration, that such figures very rarely are seen on the reverses of Roman coin, any more than single horses; and that therefore the imitation of them, by the Britons, could scarcely be derived from that source; it is much more probable, that the ideas of these figures to be impressed on coin, were acquired from intercourse with the Phœnicians, in the earliest ages; who from their neighbourhood to, and communication with the Persians, could not but be well acquainted with the custom of adopting *such* figures as ornaments, and badges; figures that are found so often repeated on the walls of Persepolis, and remain there to this hour.

It may further be observed, that the remarkable form of some of these British coins, they being *convex* on one side, and *concave* on the other, as I have myself seen them to be in more instances than one; shews a most striking affinity, in this respect, between the customs of the Britons, and that of the most antient Eastern nations (as an affinity has already been remarked, also, in their strongholds, and altars;) and therefore indicates these coins to have been *prior* to the time of the Romans.—It is well known that some of the coins of Pæstum, were thus *convex* on one side, and *concave* on the other; § and so also were some of the most antient of the Grecian coins.

‡ Moreton's Northamptonshire, p. 500.

§ See Ruins of Pæstum, p. 31.

other unquestionably British Remains are also met with), do lead us, by a chain of very fair and plain reasoning, to conclude, that these masses of Rock, so connected with such Rock Basons, must have been connected with British usages and superstitions.

There remains nothing more to be taken notice of, with regard to British works, and the efforts of labour and ingenuity in those early ages, than merely to remark, that some of those surprising banks and ditches of vast extent, traversing the country, in different parts of this Island, and which are too generally deemed to have been either Danish, or Saxon, may justly be rather deemed to have been, in reality, works of the time of the Britons; if not absolutely British works.

Some of these kinds of mounds and ditches, indeed, do certainly seem to have been the boundary marks of districts, and of petty kingdoms, in the time of the Saxon Heptarchy; and even in later ages. But some of them, (as Dr. Stukeley has particularly remarked with regard to *Wansdyke*, in Wiltshire,) were clearly formed *before* the time of the Romans; because Roman works adjacent, are found either to have interfered with them; or at least to have been made to take an irregular direction on purpose to avoid them.

Thus the Roman way, the *Via Badonica*, is made to go along by the side of *Wansdyke*, taking this great bank, in fact, for its direction.

And of those that were really the works of the Saxons, it may be remarked; and with regard to *Offa's Dike* particularly; that in some

These British pieces of money have not only been found at *Kambre*, and in other spots of *Cornwall*, that were long unquestionably, places, above all others, of British residence, and objects of British reverence; but also in *Wales*, and in most parts of *Britain*.—Their history has been very fully investigated by *Dr. Borlase*; and the suspicion of their having been either *Phœnician*, or *Greek*, or *Roman*, has been by him very satisfactorily removed;|| and that from other considerations, as well as from their being found in no other country except in *Britain*, whilst they have been dug up here in such numbers.—Those who wish to see the delineation of these curious British coins, will find them very well represented in *Borlase's Antiquities of Cornwall*, Pl. XXIII. p. 259; and in *Gough's Caunden*, Vol. I. Pl. XV. p. lxx. See also *Plot's Oxfordshire*, p. 309. 328. Pl. XV. fig. 19, 20.—And the engravings of the British Coins in *Speed*, p. 172, 173, 174, 175, 176, 177, convey a true idea of the devices, though not so carefully executed.

|| *Antiquities of Cornwall*, p. 253. 265. 269. 273. 275. 280.—*Pennant's Tour in Wales*, Vol. I. p. 66.

instances there were remaining prior works of the descendants of the Britons, even of a very similar kind, near adjoining.

For whilst *Offa's Dike* formed *the Saxon line*; *Wat's Dike* formed *the Welch, or British line*;* and may justly be suspected to have been also a prior work.

To proceed to trace minutely these sort of works *here*, would be not only tedious, and useless, but deviating from the purport of these sheets;—which is, chiefly to trace the modes of dwelling; habits of living; the origin of civil, and religious structures; manners; customs; and improvements of art and science; and the strongest characteristic outlines, and most striking features of the history of passing ages.

With regard to these great and extended boundary Munitions, therefore, whilst we leave the ascertaining the precise extent of them, (like the ascertaining, and tracing of Roman roads,) to the more detailed labours of those curious persons who investigate these subjects geographically, we may conclude with saying, that neither these Dikes, nor Hill Fortresses, nor their dire Superstitious Rites, could at last preserve the Britons from those Foreign Invaders, who were to be both their scourge, and their deliverers, from the bands of dark ignorance, and inveterate prejudice.

The Romans, in the course of those wondrous events, that are solely under the direction of the Divine Providence, Which ruleth in the Heavens over all, and setteth up one, and putteth down another; and, as was declared of old to Sennacherib, raiseth up mighty powers, merely like the axe, or the hammer, to cut down, and to destroy, at proper seasons:—the Romans, under the guidance of This Almighty Power, came at last to destroy the dire prevalence of Druidical superstition;—to force the Britons from their torpid state of adherence to barbarous customs, and usages;—and to punish the horrid perpetrators of those accursed rites, for the sake of the celebration of which, were lighted those very sacrificial fires, into whose flames *Suetonius Paulinus* flung the priests themselves, who stood prepared to have officiated at their wonted human sacrifices. †

* Pennant's Tour in Wales, p. 261.

† This dreadful and horrible destruction of the Britons, and their Druids, by the Romans; related with such brief energy by Tacitus, (Annal. lib. xiv. sect. 30.) is one of

the *many* fearful instances of the Divine vengeance upon the corruptions and wickednesses of idolatrous abominations.—And the due consideration of it, ought to be rendered useful, amongst other arguments, to remove from the minds of prejudiced persons, that hack-nied, common-place objection, that has so often been made by scoffers against the history of Sacred Writ, because of the supposed cruelty exercised by the Israelites, in the destruction of the Canaanites; who were indeed the very first introducers, and propagators of the worst of all these abominations.

Such carpers against faithful history, and against Divine Ordinances, in this instance of the destruction of the Canaanitish nation, where the will and judgment of God was executed by the Israelites, in consequence of an express Divine Command, entirely forget, in the first place, that it was not executed till after much long suffering, and forbearance; during which they continued utterly incorrigible:—for we read (Genesis, chap. xv. ver. 16), that this punishment was not brought upon them *sooner*,—because their iniquities were *not yet full*.

They also forget, that this denunciation was made only with regard to those *few*, who were the sources of all the worst corruptions enumerated, (Deuteronomy, chap. xx. ver. 16, 17, 18. and Leviticus, chap. xx. ver. 1 to 23.) and that with regard to the rest, the Israelites were expressly commanded *not* to exercise such severity upon them; but, before they fought, even to offer terms of peace; and if those terms were accepted, then not to destroy them.—Deuteronomy, chap. xx. ver. 10, 11.

The scoffers against the account in the Holy Scripture, do also entirely forget; that when the Jews themselves had fallen into idolatry, contrary to the admonitions given them by Moses (Deuteronomy, chap. viii. ver. 19, 20.), threatening that they should themselves, in case of such disobedience, be subject to the very same destruction;—and when they had moreover added the last aggravated offence, as the holy Apostle Peter told them (Acts, chap. ii. ver. 23. 36. chap. iii. ver. 15.) of rejecting, and crucifying the Prince and Lord of Life, in his days of humiliation; even the CHRIST JESUS of NAZARETH, Who is to appear afterwards THEIR GREAT MESSIAH, on His Throne of Glory;—they themselves were destroyed even by a more horrible destruction than they ever brought upon the Canaanites: And that, even by the merciful *Titus*.

The horrible account, well worth reading, is given at large by Josephus, lib. v. chap. 13. sect. 4.—lib. vi. chap. 4, 5, 8, and 9; and it ought not to be forgotten; that their Priests were not only slain by their Altar, but that, before the final catastrophe, the Roman soldiers, in their wrath, had nailed those Jews they caught to crosses, about the walls of Jerusalem, by way of jest, till their multitude was so great, that room was wanted for the crosses, and crosses were wanting for the bodies, (Lib. v. chap. 11. sect. 1.)

Scoffers at the account concerning the Canaanites, forget also, what is related concerning the celebrated, and so frequently admired *Alexander the Great*—That when he took the city of Tyre, he put six or eight thousand Tyrians to the sword; caused two thousand more to be crucified before the walls; and sold all the rest for slaves.—(Arrian, lib. ii.—Quintus Curtius, lib. iv. chap. 4.) fulfilling the dire denunciations of the Almighty; (Isaiah, chap. xxiii.—Ezekiel, chap. xxvi. xxvii. xxviii.)

In short; to do fair justice to what is related in Sacred Writ concerning the Canaanites, we ought to acknowledge, that the same supposed objection that lies against the punishment of the Canaanitish Nations, lies exactly, with as much fairness, against the punishment of

any criminal whatever; or however necessary that punishment may be for the good of society.

The Invisible, and Eternal Lord God, present to every spirit, maketh whom it pleaseth Him, wheresoever, and when He thinks fit, the tremendous instruments of His wrath;—although He does not always openly declare His purpose before hand, as was done in the case of the *Canaanites*, and of the *Tyrrians*, and of the *Jews*.—He also (which is our great consolation) bringeth forth good out of evil;—and maketh even the workers of mischief, unintentionally the preparers of dispensations for universal welfare, and blessing.



INDEX THE FIRST,
OF
PASSAGES
IN
THE HOLY SCRIPTURES
REFERRED TO, OR ILLUSTRATED
IN
THIS WORK.

| | PAGE | | PAGE |
|------------------------------|----------|-------------------------------|----------|
| GENESIS, chap. i. ver. 14 - | 141 | Exodus, chap. xx. ver. 26 - | 166 |
| chap. iv. ver. 17 - | 96 | chap. xxi. ver. 14 - | 178 |
| chap. viii. ver. 20 - | 178 | chap. xxiv. ver. 4, 5, | |
| chap. xii. ver. 7 - | 178 | 6, 7, 8 - - - - | 133, 134 |
| chap. xiv. ver. 10 - | 63 | chap. xxiv. ver. 13 - | 179 |
| chap. xv. ver. 16 - | 344 | chap. xxix. ver. 37. | |
| chap. xxii. ver. 9 - | 178 | 44 - - - - | 178 |
| chap. xxiii. ver. 2, 17 | 94 | chap. xxx. ver. 27 - | 178 |
| chap. xxviii. ver. 11, | | Leviticus, chap. vi. ver. 9 - | 178 |
| 18 - - - | 114, 173 | chap. xx. ver. 1, 23 | 344 |
| chap. xxxi. ver. 13, | | chap. xxvi. ver. 1 - | 257 |
| 44, 45, 46, 51, 52 | 113 | chap. xxvi. ver. 30 | 204, 205 |
| chap. xxxv. ver. 1, 3 | 178 | Numbers, chap. vii. ver. 84 - | 178 |
| chap. xxxv. ver. 7, | | chap. xiii. ver. 22 - | 94 |
| 14, 15 - - - | 113, 173 | chap. xviii. ver. 3 - | 178 |
| chap. xxxv. ver. 27 | 94 | chap. xxiii. ver. 1 | 177 |
| chap. xxxv. ver. 19, | | chap. xxiii. ver. 2, 3, | |
| 20 - - - | 126 | 4, 5, 6 - - - | 178 |
| chap. xxxvii. ver. 14 | 94 | chap. xxiii. ver. 13, | |
| chap. xlix. ver. 9, 10 | 185 | 14, 27, 28, 29, 30 | 181 |
| chap. xlix. ver. 31 | 126 | chap. xxiii. ver. 7, 8, | |
| Exodus, chap. i. ver. 11, 14 | 278 | 9, 10 - - - - | 182 |
| chap. v. ver. 7, 8, 11, | 278 | chap. xxiii. ver. 18, | |
| 12, 13, 18 - - - | 285 | 19, 20, 21, 22 - | 183 |
| chap. v. ver. 7 - - - | 285 | chap. xxiii. ver. 23, | |
| chap. xvii. ver. 15 - | 178 | 24 - - - - | 184 |
| chap. xx. ver. 24 - | 178 | chap. xxiv. ver. 3, 4, | |
| chap. xx. ver. 25 - | 177 | 5, 6 - - - - | 184 |

INDEX. PASSAGES OF SCRIPTURE.

| | PAGE | | PAGE |
|---------------------------------|----------|--------------------------------|----------|
| Numbers, chap. xxiv. ver. 7, 8, | | Judges, chap. xv. ver. 8. 11 - | 64 |
| 9. 15, 16, 17, 18 | 185 | chap. xx. ver. 45-47 | 65 |
| chap. xxiv. ver. 19, | | chap. xxi. ver. 13 - | 65 |
| 20, 21, 22, 23, 24, | | 1 Samuel, chap. ii. ver. 10 - | 183 |
| 25 - - - - | 186 | chap. ii. ver. 33 - | 178 |
| chap. xxxiii. ver. 52 | 205 | chap. vi. ver. 15. 18 | 119 |
| Deuteronomy, chap. ii. ver. 10, | | chap. vii. ver. 9 - | 173 |
| 12. 20, 21, 22, | | chap. vii. ver. 12 - | 119, 173 |
| 23 - - - | 10 | chap. vii. ver. 14, 15. | |
| chap. iii. ver. 4, | | 18, 19 - - - | 258 |
| 7. 19 - - - | 63 | chap. xi. ver. 14, 15 | 148 |
| chap. vii. ver. 5 | 179 | chap. xiii. ver. 6 - | 62 |
| chap. viii. ver. | | chap. xiii. ver. 9 - | 173 |
| 19, 20 - - - | 344 | chap. xiii. ver. 4, 22 | 149 |
| chap. ix. ver. 1 | 63 | chap. xiv. ver. 11 - | 62 |
| chap. xii. ver. | | chap. xiv. ver. 14 - | 70 |
| 2, 3 - - - | 172 | chap. xv. ver. 12. 31 | 173 |
| chap. xx. ver. | | chap. xxiii. ver. 13. | |
| 10, 11, 16, 17, | | 14. 19. 25, 26 - | 75, 76 |
| 18 - - - | 344 | chap. xxvi. ver. 1 - | 76 |
| chap. xxvii. ver. | | 2 Samuel, chap. ii. ver. 1 - | 94 |
| 2, 3, 4 - | 118, 135 | chap. v. ver. 6. 8 | 91 |
| Joshua, chap. iv. ver. 1, 2, 3, | | chap. xv. ver. 10 - | 94 |
| 4, 5 - - - - | 133 | chap. xviii. ver. 17 | 284 |
| chap. iv. ver. 9 - - | 135 | chap. xxiv. ver. 18 | 178 |
| chap. iv. ver. 20. 24 - | 134, 173 | 1 Kings, chap. i. ver. 9 - | 149 |
| chap. vii. ver. 24, 25, | | chap. iii. ver. 2, 3, 4 | 206 |
| 26 - - - - | 284 | chap. vii. ver. 9, 10 | 263 |
| chap. viii. ver. 29 - | 283 | chap. vii. ver. 11, 12 | 33 |
| chap. viii. ver. 30 - | 118 | chap. viii. ver. 64 - | 207 |
| chap. x. ver. 1 - - - | 93 | chap. xii. ver. 31, 32 | 205 |
| chap. x. ver. 16, 17, 18, | | chap. xv. ver. 14 - | 205 |
| 19. 22. 26, 27 - | 62, 283 | chap. xvi. ver. 33 - | 238 |
| chap. xi. ver. 13 - - | 95 | chap. xviii. ver. 13 | 62 |
| chap. xv. ver. 13 - | 94 | chap. xviii. ver. 30 - | 179 |
| chap. xv. ver. 63 - | 91 | chap. xxii. ver. 43 - | 205 |
| chap. xxii. ver. 10, 11. | | 2 Kings, chap. viii. ver. 64 - | 207 |
| 16. 19. 27. 34 - - | 179 | chap. xi. ver. 14. 17 | 149 |
| chap. xxiv. ver. 26, 27 | 118, 148 | chap. xii. ver. 3 - | 205 |
| chap. xxix. ver. 26 - | 148 | chap. xiv. ver. 4 - | 205 |
| Judges, chap. iv. ver. 12. 14 - | 65 | chap. xv. ver. 4. 35 | 205 |
| chap. iv. ver. 31 - | 109 | chap. xvi. ver. 4 - | 204 |
| chap. vi. ver. 2 - - - | 62 | chap. xvii. ver. 9. 11 | 206, 238 |
| chap. vi. ver. 25. 31 - | 178, 238 | chap. xviii. ver. 4. 22 | 205 |
| chap. ix. ver. 5. 18 - | 258 | chap. xviii. ver. 22 - | 178 |
| chap. ix. ver. 6 - | 148 | chap. xxi. ver. 3 - | 206 |
| chap. ix. ver. 51 - | 96 | chap. xxiii. ver. 3 - | 150 |

INDEX. PASSAGES OF SCRIPTURE.

| | PAGE | | PAGE |
|---------------------------------|----------|----------------------------------|------|
| 2 Kings, chap. xxiii. ver. 6 - | 238 | Jeremiah, chap. xvi. ver. 16 - | 64 |
| chap. xxiii. ver. 8, 19 | 206 | chap. xl. ver. 13, 16 | 189 |
| 1 Chronicles, chap. xi. ver. 6 | 91 | chap. xli. ver. 8, 9 | 45 |
| 2 Chronicles, chap. xi. ver. 10 | 94 | chap. xli. ver. 1. 3 - | 189 |
| chap. xi. ver. 15 | 205 | chap. xli. ver. 8, 9 - | 45 |
| chap. xiv. ver. 3 | 205 | chap. xlix. ver. 16 - | 63 |
| chap. xv. ver. 17 | 205 | Lamentations, chap. ii. ver. 7 | 179 |
| chap. xvii. ver. 6 | 205 | Ezekiel, chap. vi. ver. 3 - - | 204 |
| chap. xx. ver. 33 | 205 | chap. viii. ver. 16 - | 179 |
| chap. xxi. ver. 11 | 205 | chap. xvi. ver. 31. 39 | 204 |
| chap. xxviii. ver. | | chap. xxxii. ver. 27 - | 325 |
| 4. 25 - - - | 204, 205 | chap. xxxiii. ver. 27 | 64 |
| chap. xxxi. ver. 1 | 205 | Joel, chap. i. ver. 13 - - | 179 |
| chap. xxxii. ver. | | chap. ii. ver. 17 - - | 179 |
| 3 - - - - | 238 | Amos, chap. i. ver. 7. 14, 15 - | 33 |
| chap. xxxiii. ver. | | chap. ii. ver. 8 - - | 179 |
| 19 - - - - | 238 | Obadiah, ver. 3 - - - - | 63 |
| chap. xxxiv. ver. | | Malachy, chap. i. ver. 7. 10 - | 179 |
| 3 - - - - | 205 | chap. ii. ver. 13 - | 179 |
| Ezra, chap. vi. ver. 4 - - | 33 | Judith, chap. iv. ver. 6 - | 66 |
| Psaln xxvi. ver. 6 - - - | 179 | chap. v. ver. 1 - - - | 66 |
| xxxi. ver. 2. 4 - - - | 89 | chap. vi. ver. 6. 12, 13, | |
| xliii. ver. 4 - - - - | 179 | 14 - - - - - | 66 |
| lxi. ver. 3 - - - - | 89 | Matthew, chap. v. ver. 23 - | 179 |
| lxxi. ver. 2 - - - - | 89 | chap. xxiii. ver. 18. | |
| lxxv. ver. 5, 6. 12 - | 183 | 35 - - - - - | 179 |
| lxxvi. ver. 4 - - - - | 89 | Mark, chap. xiii. ver. 1 - | 263 |
| xcii. ver. 10, 11 - - | 183 | Luke, chap. xi. ver. 51 - - | 179 |
| cvi. ver. 36, 37 - - - | 258 | John, chap. iii. ver. 16, 18 - | 183 |
| cxxxii. ver. 18 - - - | 183 | Acts, chap. xvii. ver. 23 - | 180 |
| Isaiah, chap. ii. ver. 6. 9 - | 258 | 1 Corinthians, chap. ix. ver. 13 | 179 |
| chap. ii. ver. 19 - - | 62 | chap. x. ver. 18 | 179 |
| chap. xix. ver. 19 - | 179 | Hebrews, chap. vii. ver. 13 - | 179 |
| chap. xxiv. ver. 1 - | 339 | chap. xiii. ver. 10 - | 179 |
| chap. xl. ver. 15 - | 339 | Revelations, chap. v. ver. 5 - | 185 |
| chap. li. ver. 5, 9 - | 183 | chap. vi. ver. 9 - | 179 |
| chap. liii. ver. 1 - - | 183 | chap. viii. ver. 3 | 179 |
| chap. lvi. ver. 7 - - | 179 | chap. ix. ver. 13 | 179 |
| chap. lxii. ver. 8 - - | 183 | chap. xi. ver. 15 | 128 |
| Jeremiah, chap. iii. ver. 23 - | 89 | | |

INDEX THE SECOND,
 OF SOME FEW
 INCIDENTAL CIRCUMSTANCES,
 NOT MENTIONED IN THE TABLE OF CONTENTS;
 AND OF SOME
 PECULIAR PASSAGES,
 IN
 ANTIENT CLASSIC AUTHORS,
 REFERRED TO, OR ILLUSTRATED, IN THIS VOLUME.

| A | PAGE | Bods, British, account of them : and of the places where re- mains of them are to be met with - - - - - | PAGE |
|---|------|--|--------------------------------|
| AGRIPPA's account of the Britons - - - - - | 3 | Bricks still extant, like those made in Egypt by the Children of Israel, and probably of the same age - - - | 11,13,14, 23,24,25 26,27 |
| Alexander's attack of a Sogdian Hill Fortress - - - | 69 | British dresses, armour, and manners - - - - - | 285 96,97,98, |
| Armorial Distinctions, more ancient than has been usually imagined - - - - - | 101 | British Fortresses, sometimes mistaken for Danish - - - | 99,100 37 |
| Astronomy, the Druids acquainted with that Science; —and some account of their Instruments for Observations - - - - - | 138 | — sometimes mistaken for Roman - - - | 39 |
| Athens, originally a mere Hill Fortress - - - - - | 90 | — many have had either their names changed, or buildings of stone erected upon them, in latter ages - - - - - | 41 |
| B | | British mode of dressing and preparing corn expeditiously | 48 |
| Balaam's Prophecy, standing by high Altars, on an high Place - - - - - | 182 | C | |
| Balaam's hearing words from the mouth of his ass, a mere vision, or dream - - - | 184 | Canoes, mode of constructing them, by savage nations; and appearances of just such amongst the Britons - - - | 30 |
| Bede's account of the Britons being finally driven from their hill fortresses by the Picts and Saxons - - - | 76 | | |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | PAGE | | PAGE |
|--|--------|--|----------|
| Canoes; some made of osiers by the Britons - - - | 30 | | |
| Cars of the Britons - - | 106 | | |
| Cæsar, his account of British towns - - - | 13 | | |
| — also of British manners, and of their garb, &c. - | 96, 97 | | |
| — and of their courts of judicature - - - | 149 | | |
| — his account of the human sacrifices of the Britons - - - | 219 | | |
| — his account of the interments of the Britons - | 292 | | |
| Corn, curious manner of dressing it by the antient Britons | 48 | | |
| D | | | |
| Diodorus, his account of British dwellings - - - | 14 | | |
| — his mention of the hiding pits of the Britons | 48 | | |
| — some further accounts of his concerning the Britons - - - | 96, 97 | | |
| — his account of human sacrifices being usual amongst the Britons - - | 218 | | |
| — his account of the Barrow of Ninus - - | 283 | | |
| — his account of the Cairns in Minorca - - | 285 | | |
| — his account of cramming dead bodies into a wooden inclosure, or coffin; and then covering them with stones, in a sort of Kistvaen, or Stone Closet - - | 286 | | |
| Distinctions between Barrows, Hill Fortresses, and Norman Mounts - - - | 298 | | |
| Dresses of the Britons - - | 96 | | |
| E | | | |
| Egyptian causeways, for the conveyance of great stones | 261 | | |
| Egyptian pyramids, a magnificent improvement of Barrows - - - | 276 | | |
| F | | | |
| Form of delivering a rod; caduceus; pipe; or stick; to senators, and public officers; sitting in a circle - - | | | 151 |
| G | | | |
| Garlands placed; and oil poured; upon a stone Pillar, on a Barrow, by Alexander - | | | 271 |
| Greatness, and vast ponderosity of stones, raised to great heights, in many instances, in the earliest ages of the world | | | 262 |
| Groves, mentioned in the Holy Scriptures; oftentimes, not groves of trees - - | | | 238 |
| H | | | |
| Hebron, an Hill Fortress - | | | 94 |
| Herodotus, incredulous as to the existence of Britain - - | | | 7 |
| — his account of the first origin of armorial bearings | | | 103 |
| — his account of the first invention of the helmet - | | | 106 |
| — his account of causes for conveying the stones of the pyramids - - | | | 261 |
| — his account of the Barrow of Alyattes - - | | | 273 |
| — his account of the manner of making bricks, in Egypt, for pyramids - | | | 277 |
| — his account of the Barrows of the Scythian kings | | | 279, 281 |
| Herodian, his account of the puncturing of the Britons - | | | 96 |
| Hirtius, his account of hiding pits in Africa, on the Barbary coast - - - | | | 44 |
| Helmets of the Britons; designed to disfigure - | | | 105, 106 |
| Helmets of the Egyptians; the cause of those strange figures on their bas-reliefs, with heads of dogs, &c. - - | | | 106 |
| Hiding Pits, mentioned by Tacitus - - - | | | 44 |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | PAGE | | PAGE |
|--|----------------------------------|---|----------|
| Hiding Pits, mentioned by Diodorus Siculus - - - | 48 | taken prisoner, in an hiding pit - - - | 56 |
| ----- mentioned by Hirtius - - - | 44 | Josephus's account of the use made of antient hiding pits, by the seditious leaders of the Jews, John and Simon - | 58 |
| ----- mentioned by Josephus - - - | 56, 58 | ----- his account of the Caves of the Idumean robbers, attacked by Herod - | 58 |
| High Places; or altars for offerings; clearly distinguished from altars for burning of victims - - - | 179 | ----- his account of Mount Sion, the city of David - | 91 |
| Hillocks used for kitchens - | 78 | ----- his account of the subterranean cavern there; and of Simon's endeavour to escape by means of it - | 92 |
| Homer; substance of his account of the Grecian, and Trojan cars - - - | 110, 111 | ----- his account of immense stones, in the structure of the Temple, and elsewhere - - - | 263, 264 |
| ----- his fair account of the rude Pillar, on the Barrow of Ilus - - - | 127 | Justin, his account of the Barrow of Hephestion - - | 275 |
| ----- also on that of Hector; and on that of Elpenor - | 128 | K | |
| ----- his account of the raising of the Barrow of Patroclus - - - | 127 | Kings; their inaugurations on stones; and their standing by pillars - - - | 147 |
| ----- his account of the antient manner of holding Courts, in stone circles - | 151, 152 | L | |
| ----- his account of basons, formed on the ground, to receive the blood of victims - | 175 | Ladders; used to ascend Altars | 166, 236 |
| ----- his account of high altars, or high places - | 207 | Lead; its use in engraving on granite rocks - - | 124 |
| ----- his account of the Barrow of Tydeus - - | 275 | Learning of the Druids; derived from the immediate descendants of Seth - - | 142 |
| ----- of the Barrow of Æpytus - - | 282 | London-stone; no mere millary stone - - - | 118 |
| I | | M | |
| Indian Customs; some similar to those of the antient Britons, and of other aboriginal nations - - - | 68, 116, 151, 154, 167, 174, 264 | Maundrell's manifest description of a Cromlech, in Syria | 226 |
| Jonathan's attack of an Hill Fortress - - - | 70 | Mercury; observations on the wings on his heels - - | 125 |
| Josephus, his account of the speech of Agrippa - - | 3 | Mining; well known to the Jews; and much made use of in antient days - - | 93 |
| ----- his account of burning the wall of Masada - - | 33 | Money of the Britons; concave, and convex, like that of Pæstum - - - | 311 |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | | | |
|---|----------|---|-----------|
| <i>Mote Hills</i> , or Court Hills; became such originally, merely because they had been the residence of Chieftains - | PAGE | with Druidical, and with Canaanitish, and with Mexican superstitions - - | PAGE |
| | 88 | Simon's endeavour to escape by a subterraneous passage, and by mining, from Mount Sion | 249 |
| <i>Mount Sion</i> at Jerusalem; originally a rude Hill Fortress - | 91 | Stones in circles, to mark stations; not to sit upon - | 92 |
| N | | Strabo's account of the British dwellings - - - | 137 |
| Nodules of a pyritical kind, found mixed with lime in a stone sarcophagus, probably the decomposition of iron weapons - - - | 301 | — the substance of his account of British manners, dresses, and armour - - | 14 |
| O | | — his account of the British human sacrifices - | 97, 98 |
| Obelisks of Egypt; their engravings probably wrought by means of lead - - | 124 | T | 219 |
| Offerings on altars; a very different thing from the burning of victims on altars - - | 167, 179 | Tacitus, his account of British fortresses - - - | 19 |
| P | | — his account of the hiding pits of the Germans, &c. | 44 |
| <i>Pedila</i> ; marks of distinction | 125 | — many circumstances concerning British manners and dress, &c. collected from his accounts, compared with those of others - - | 97, 98 |
| Pillars of Hercules - - | 124 | — his account of human sacrifices - - - | 229, 230, |
| Pillars of Bacchus - - | 124 | — his account of the Barrow raised by Cæsar Germanicus, in Germany - | 237 |
| Pits to receive the blood of victims - - - | 175 | Tartarian mines of gold and silver - - - | 268 |
| Pliny; his account of Rocking Stones - - - | 327 | Temples; the Druids in reality had none - - - | 282 |
| Plutarch; his account of the stone set up by Theseus - | 125 | Trenches; on the tops of some Barrows - - - | 113 |
| — his account of the stone, or rude pillar, on the Barrow of Achilles - - | 128 | Tool; none to be lifted up on the most antient patriarchal altars - - - | 299 |
| Q | | V | 135 |
| Quintus Curtius; his account of Alexander's attack of an Hill Fortress, in Sogdiana - | 69 | Vitrified walls: possible, plain, and easy solution of the cause of them - - - | 32 |
| — his account of the stones of memorial set up by Bacchus - - - | 126 | W | |
| — his account of the Barrow of Hephestion, raised by Alexander - - | 276 | Water; many places in the early ages supplied only with rain-water - - - | 83 |
| R | | | |
| Rome; at first a mere Hill Fortress - - - | 90 | | |
| S | | | |
| Serpent; its figure connected | | | |

INDEX OF PASSAGES
 IN
 THE HOLY SCRIPTURES,
 REFERRED TO, OR ILLUSTRATED
 IN
 THIS WORK.

| | PAGE. | | PAGE. |
|--|-------|----------------------------------|-------|
| Exodus, chap. xxxi. ver. 2, 3, 4, 5, 6. | 19 | John, chap. i. ver. 29, 36. | 95 |
| chap. xxvi. ver. 1, 31. | 77 | chap. v. ver. 26. | 95 |
| 1 Kings, chap. vi. ver. 27, 28, 29, 32. | 77 | chap. x. ver. 16. | 43 |
| Job, chap. iii. ver. 17. | 143 | chap. xi. ver. 52. | 46 |
| Jeremiah, chap. xxxviii. ver. 6, 9, 10, 11, 12, 13. | 156 | chap. xiii. ver. 34, 35. | 43 |
| Ezekiel, chap. xi. ver. 16. | 8 | chap. xvii. ver. 2. | 95 |
| chap. xl. ver. 16. | 26 | 2 Corinthians, chap. v. ver. 11. | 42 |
| Matthew, chap. vi. ver. 5, 6. | 45 | Galatians, chap. iv. ver. 10. | 51 |
| chap. x. ver. 34, 35. | 43 | Ephesians, chap. i. ver. 10. | 46 |
| chap. vi. ver. 16, 17, 18. | 52 | Colossians, chap. ii. ver. 8. | 42 |
| chap. xvi. ver. 16. | 88 | chap. ii. ver. 16. | 51 |
| | | chap. iii. ver. 4. | 46 |
| | | 1 Timothy, chap. vi. ver. 5. | 39 |
| | | Revelations, chap. v. ver. 5. | 95 |
| | | chap. v. ver. 6. | 95 |
| | | chap. ix. ver. 21. | 52 |
| | | chap. xviii. ver. 23. | 52 |

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The Frontispiece—A North East View of the Herefordshire Beacon { to face the Title-page.

| Plate | To front page |
|--|---------------|
| I. Fig. 1. Plan of the Herefordshire Beacon; | 20 |
| Fig. 2. Plan of the White Catter-thun - - - - - | 20 |
| II. Fig. 1. View of the Herefordshire Beacon, at a distance, as seen in the vale beneath; | |
| Fig. 2. View of the White Catter-thun in Scotland - - - - - | 28 |
| III. Fig. 1. View of Old Sarum; - - - - - | |
| Fig. 2. Plan of Old Sarum - - - - - | 84 |
| $\frac{III}{4}$. Fig. 1. Plan of Badbury Rings in Dorsetshire; | |
| Fig. 2. View of Badbury Rings - - - - - | 86 |
| $\frac{III}{3}$. Arms, and habits, of the antient Britons - - - - - | 100 |
| $\frac{III}{4}$. Druidical hook, or rod - - - - - | 100 |
| IV. Fig. 1. Stone of Memorial in Cornwall; and | |
| Fig. 2. Stones of Memorial at Trelech, Monmouthshire - - - - - | 120 |
| V. Fig. 1. Plan of Druidical Circle, on Fidess Hill, in Scotland; | |
| Fig. 2. Plan of Druidical Circle at Boscawen-un, in Cornwall - - - - - | 146 |
| VI. Plans of Stone Henge - - - - - | 172 |
| VII. Particular Views of Stone Henge - - - - - | 172 |
| $\frac{VII}{1}$. View of Stone Henge, as it was in 1790; seen from the western side of the leaning stone - - - - - | 188 |
| $\frac{VII}{3}$. View of Stone Henge, in 1798, after the fall of the great western Trilithon; seen from the western side of the leaning stone - - - - - | 188 |
| $\frac{VII}{4}$. View of Stone Henge, in 1790, seen from the southern side of the leaning stone - - - - - | 188 |
| VIII. Plan, elevation, and measures, of Kitt's Cotty-House - - - - - | 216 |

DIRECTIONS TO THE BOOKBINDER.

| Plate | To front page |
|---|------------------|
| IX. Fig. 1. View of Kitt's Cotty-House; | |
| Fig. 2. Altar Stone, in Scilly - - - - - | 222 |
| $\frac{IX}{3}$. The Syrian Altar, according to the real measures given by Maundrell | 226 |
| X. Fig. 1. Double Cromlech at Plas-Newydd, in Anglesey; | |
| Fig. 2. Cromlech at Lanyon, in Cornwall - - - - - | 232 |
| $\frac{X}{4}$. Double Cromlech at Plas-Newydd, seen on the contrary side from the former view - - - - - | 234 |
| $\frac{X}{5}$. Form, and dimensions of the Stones of the double Cromlech, at Plas-Newydd; and of the upper Stones of that near Trevor, in Anglesey | 234 |
| XI. Double Cromlech near Trevor, in Anglesey - - - - - | 236 |
| XII. Fig. 1. Barrow near Tullagh, in Caterlogh, Ireland; | |
| Fig. 2. Aggleston, Stone Barrow, in the Isle of Purbeck - - - - - | 270 |
| $\frac{XII}{1}$. Silbury Hill, seen on the East side - - - - - | 326 |
| $\frac{XII}{3}$. Silbury Hill, seen on the South west side - - - - - | 326 |
| $\frac{XII}{4}$. Low Barrows - - - - - | 326 |
| $\frac{XII}{5}$. Variety of Barrows - - - - - | 326 |
| XIII. Fig. 1. Rocking Stone, on Golcar Hill, near Halifax, in Yorkshire; | |
| Fig. 2. Rocking Stone, called Men-amber, in Cornwall - - - - - | 330 |
| XIV. Fig. 1. Rocking Stone at Brimham Rocks, Yorkshire; | |
| Fig. 2. Unfinished Rocking Stone - - - - - | 334 |
| XV. Fig. 1. Insulated Rock, aided by art, in Yorkshire; | |
| Fig. 2. Insulated Rock, aided by art, in Sussex - - - - - | 336 |

Certain mistakes that have arisen, may perhaps render the following List, of some other Works of the same Author, satisfactory to such persons as may peruse this Volume.

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VOL. II.

LONDON:

PRINTED BY W. EULMER AND CO.
CLEVELAND-ROW, ST. JAMES'S;

FOR G. AND W. NICOL, BOOKSELLERS TO HIS MAJESTY, PALL-MALL.

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CONTENTS.

BOOK II.

OBSERVATIONS ON THE WORKS OF THE ROMANS IN THIS ISLAND;
—AND PARTICULARLY ON THOSE OF A MILITARY KIND.

| | PAGE |
|---|-------|
| <i>And first; the distinctions pointed out, of such Fortresses as were peculiarly Roman</i> | 1 |
| <i>Richborough, in Kent</i> | 2 |
| | { 111 |
| <i>Portchester, in Hampshire</i> | 22 |
| | { 119 |
| <i>Some similar ones in foreign Countries described</i> | |
| <i>At Nicopolis, in Egypt</i> | 35 |
| <i>Castle Kienan, in Egypt</i> | 36 |
| <i>Other great Roman Castra in Britain described.</i> | |
| <i>Pevensey Castle, in Sussex</i> | 37 |
| <i>Castor, in Norfolk</i> | 49 |
| | { 146 |
| <i>Station, at Taesborough, in Norfolk, just referred to</i> | 51 |
| <i>And also one near Caerdiff, in Monmouthshire</i> | 52 |
| <i>Burgh Castle, in Suffolk, described</i> | 53 |
| | { 116 |
| <i>Chesterford, in Essex</i> | 55 |
| | { 148 |
| | { 59 |
| <i>Account of the exact order of the marching of Roman Troops</i> | 60 |
| | { 277 |
| <i>Various Stations referred to;—where the situation of the Prætorium still remains visible;—and some of which were mere Earth-works.</i> | |
| <i>At Heppington, in Kent</i> | 63 |
| <i>At Saddleworth, in Yorkshire</i> | 63 |
| <i>At Bolton, in South Wales</i> | 63 |
| <i>Melandra Castle, in Derbyshire</i> | 63 |
| <i>Little Chesters, in Cumberland</i> | 64 |
| <i>Great Chesters, in Camberland</i> | 64 |
| <i>Chester, in Cheshire, just referred to</i> | 64 |
| <i>Station near Caernarvon, in Wales</i> | 65 |

| | PAGE |
|--|------|
| <i>Some of their most considerable Earth-works considered.</i> | |
| <i>At Dealgin Ross, near Comerie, in Strathern, in Scotland</i> | 66 |
| <i>At Ardoch, in Strathhallan</i> | 69 |
| | 125 |
| <i>At Birrens, in Amandale</i> | 71 |
| | 130 |
| <i>At Chew Green;—on the Borders</i> | 73 |
| | 73 |
| <i>Near Kirkboddo, in Strathmore, Angus</i> | 76 |
| | 94 |
| | 103 |
| <i>Account of the several Orders, and of the Distinctions, of the Troops, of which the Roman Armies consisted</i> | 76 |
| <i>Account of the precise manner of their Encamping</i> | 80 |
| | 97 |
| <i>Correction of an inadvertent Translation of Casaubon's, with regard to the contents of the Area of a Roman Prætorium;—which correction seems to remove many difficulties that have hitherto occurred, with regard to their encampments</i> | 82 |
| | 91 |
| <i>The Order of Encamping, according to this correction, found to agree exactly with the precise dimensions, of the several parts of the remains of many Castra, and Camps, that have already been mentioned</i> | 94 |
| | 103 |
| <i>A Computation, from their precise dimensions, and from the exact position of their remaining gates, of the number of Troops that might be contained, and of the order in which they might be arranged, in several well known Stations, that have been already described</i> | 109 |
| <i>Also in some others which well deserve notice</i> | 132 |
| — <i>at Pickering Moor, Yorkshire</i> | 132 |
| — <i>at Line Kirk, in Tweedale, Scotland</i> | 133 |
| — <i>at Hierna, on the River Ern</i> | 134 |
| — <i>at Castle Dykes, near Carstairs</i> | 135 |
| — <i>at Fortingaul, in Glen Lyon</i> | 136 |
| — <i>at Kaim's Castle, near Ardoch</i> | 136 |
| <i>Small Post on the Rampart of the great Camp at Ardoch</i> | 137 |
| <i>Stations near the Roman Wall, called Grinies Dyke</i> | 138 |
| <i>Duntocher Station</i> | 138 |
| <i>Castle Cary</i> | 139 |
| <i>Kirkpatrick</i> | 139 |
| <i>Westervood Station</i> | 139 |
| <i>Castle Hill</i> | 140 |
| <i>Kirkintilloch</i> | 140 |
| <i>Achindavy</i> | 140 |
| <i>Bar Hill</i> | 141 |
| <i>Account of the Hyginian mode of Encamping</i> | 141 |

CONTENTS.

iii

| | PAGE |
|--|------|
| Sodbury in Gloucestershire, adapted to the Polybian mode | 148 |
| Some Roman Castra of irregular forms | 150 |
| Verolunium | 150 |
| Silchester | 154 |
| Bath | 156 |
| Rae-dykes in the County of Merms, in Scotland | 157 |
| Re-dykes in the County of Aberdeen, Scotland | 157 |
| Burgh-head, on the Murray Frith, in the County of Murray, Scotland | 157 |
| Dover; and the peculiar construction of its Pharos | 157 |

REMARKS ON OTHER WORKS OF THE ROMANS.

| | |
|--|-----|
| <i>Few magnificent Remains of the Romans, except of a military kind, left in this country; (if any superb structures of theirs ever did exist here)</i> | 162 |
| <i>The number of fragile tessellated pavements, considerable portions of which have been found remaining perfect, a proof of the slightness of the superstructures, that originally belonged to them</i> | 163 |
| <i>Instances at Cotherstoke, or Cotterstock Northamptonshire</i> | 168 |
| <i>at Willow, Somersetshire</i> | 168 |
| <i>at Winterton, Lincolnshire</i> | 168 |
| <i>at Roxby, Lincolnshire</i> | 169 |
| <i>at Stunsfield, Oxfordshire</i> | 169 |
| <i>at Hovingham, Yorkshire</i> | 169 |
| <i>near Warrminster, Wiltshire</i> | 169 |
| <i>at Cirencester, Gloucestershire</i> | 169 |
| <i>at Caerwent Monmouthshire</i> | 170 |
| <i>at Leicester</i> | 170 |
| <i>others enumerated</i> | 174 |
| <i>An Investigation of the nature of the Superstructures, originally reared over these pavements, of which any traces do remain;—from discoveries made</i> | 174 |
| <i>At Cirencester, in Gloucestershire</i> | 174 |
| <i>At Weldon, Northamptonshire</i> | 175 |
| <i>At Mansfield Woodhouse, in Nottinghamshire</i> | 175 |
| <i>At Colesbourn, Gloucestershire</i> | 179 |
| <i>At Woodchester in Gloucestershire</i> | 185 |
| <i>Illustration of the nature of these remains; from the description of Roman Buildings in Italy itself</i> | 194 |
| <i>Some account of Cicero's Villas</i> | 195 |
| <i>Account of Pliny's Laurentine Villa</i> | 204 |
| <i>of Pliny's Tuscan Villa</i> | 211 |
| <i>Few Remains of magnificent Roman Buildings in Britain</i> | 215 |

| | PAGE |
|---|-------------------|
| <i>Remains of Temple, at Leicester</i> | 215 |
| <i>Few Remains of Roman Arches in Britain</i> | 217 |
| <i>Reasons adduced, for believing that there in reality never were many constructed in this Island</i> | 217 219 221 |
| <i>This accounted for; from considering the ARCH as having been a recent invention, just previous to the Romans Invasion of Britain, and their power here</i> | 222 |
| <i>Micklegate Bar, York:—doubt as to its being Roman</i> | 218 |
| <i>Lincoln Gate:—doubt as to it also</i> | 218 |
| <i>Gate lately remaining at Chester, Roman</i> | 218 |
| <i>Roman Arches, at Dover</i> | 218 |
| <i>Roman Arches, at Canterbury</i> | 219 |
| <i>Arthur's Oven</i> | 222 |
| <i>Inquiries as to the first Invention, and Introduction of the Arch</i> | 223 |
| <i>None in the Temple of Solomon</i> | 223 |
| <i>Fine proportions of the Temple</i> | 224 |
| <i>No Arches in the houses of Solomon</i> | 228 |
| <i>Apparent Plan of Solomon's houses</i> | 228 |
| <i>Observations, on the description of the Palace of Priam; shewing that it had no Arches</i> | 229 |
| <i>No mention of AN ARCH in all Homer's Poems</i> | 231 |
| <i>Full investigation of this fact; and of the errors of Pope's translation</i> | 232 |
| <i>No Arches in the City of Thebes, in Egypt</i> | 234 |
| <i>Nor in the Pyramids</i> | 235 |
| <i>Considerations resulting from all the descriptions of the Pyramids</i> | 236 |
| <i>No Arches in the Labyrinth of Egypt:—und an examination of the translation of the passages relating to it</i> | 239 |
| <i>No Arches at Babylon</i> | 245 |
| <i>No Arches in the antient Hindoo Buildings, in India</i> | 242 |
| <i>Their remarkable connection with Egyptian Buildings</i> | 243 |
| <i>No Arches at Persepolis, in Persia</i> | 254 |
| <i>Some account of its curious Remains; and of its general plan</i> | 256 260 |
| <i>No Arches in the truly antient Remains at Paestum;—none there before the time of Adrian, or Augustus</i> | 262 |
| <i>No Arches at Athens, prior to the time of Augustus</i> | 263 |
| <i>No Arches in the Temple of Diana, at Ephesus</i> | 264 |
| <i>No Arches in ROME itself, much prior to the time of Augustus</i> | 268 |
| <i>The Arch invented probably by Archimedes, only a little before the Augustan age</i> | 273 |
| <i>Short Account of the Great Barrier Walls of the Romans</i> | 274 |
| <i>Account of the Appearance, and Dress, of Roman Soldiers</i> | 277 |
| <i>General Reflections on the whole</i> | 281 |

MUNIMENTA ANTIQUA.

BOOK II.

OBSERVATIONS ON THE WORKS OF THE ROMANS IN THIS ISLAND;—
AND PARTICULARLY ON THOSE OF A MILITARY KIND.

BEFORE we proceed any further, in the investigation of those steps by which the Britons became civilized; and were led to adopt a change both in their mode of life, and in their mode of building;—and before we enter into any inquiry with regard to Saxon architecture;—our attention must unavoidably be drawn to the consideration of *the Works of the Romans*, in this Island; of which both Britons, and Saxons, became, in some degree, imitators.

But what is to be noticed with regard to *those works*, will be comprized in the smaller compass;—because the whole style of Roman architecture, in general, has been so frequently, and so fully explained, by many of the ablest antiquaries; and is now so perfectly well understood;—because there are very few remains of any considerable structures of the Romans in this country; except those of their military walls and camps;—and because the particular stations which they occupied;—the roads they formed;—and their chain of military posts, from one part to another, (with regard to that quarter of this Island where their prowess was best known,) have, with so much skill, already been investigated and described, in a most elaborate work, by the united labours of *General Melvill*, and *General Roy*.

In pursuing our present observations, therefore, concerning the successive changes in the style of architecture, and in the mode of constructing military fortresses, in this country;—the most material consideration, as to the *Roman works*, will be, to distinguish the peculiarity of such, as were *originally, and truly, entirely Roman*; from those many others, which are, indeed, considered to this hour, as having been *Roman*; and which did indeed become *Stations of the Romans*, in process of time; but yet were not of *their* raising.—To distinguish *their real works* from such as have been made use of by those invaders, only in consequence of having been found by them, already *strong, and well prepared places of defence*, formed beforehand by the Britons.

Such as *these*, the Romans had only to improve a very little, in order to make them perfectly fit for their own use.—As, indeed, some of them have also again been made use of, in still later ages, and have been converted into strong-holds of Saxons, of Danes, and of Normans; which has occasioned much confusion.

To burden the present investigation, by describing particularly, and individually, these latter *Brito-Roman Fortresses*, would be as useless, as it would be tedious: and especially, as many of them have, with more propriety, been mentioned, and referred to, in the preceding Volume; where neither *Maiden Castle*,—*Maiden Bower*,—*Badbury Rings*,—or *Wood Castle*, have been passed by unnoticed.

Our business therefore now must be, only to examine with as much precision as possible, such works as were, originally, *entirely Roman*: and to explain, at large, the particularities of a few of the most decided specimens that remain.

And here;—the first which claims our attention is, a most Celebrated one indeed; which, as it continues still in a better state of preservation than most others, so was also the very earliest in order of time, as to the period of its construction.

Every antiquary will easily perceive, that the military structure referred to, is *Richborough*, in Kent.

Not only its remaining walls, but its original foundations have been examined; and accurately traced, by the indefatigable pains

of the truly ingenious, inquisitive, and respectable occupier of the land, *Mr. Boys*, of Sandwich.

From him I received, many years ago, the favour of exact plans of the whole: and from them, even still more than from the observations which I made myself upon the spot, am enabled to refer decidedly to these remains, as illustrating, in the most complete manner, the nature, and the whole general construction of original Roman Fortresses in this Island.

There is every reason to believe, from the concurrent testimony of medals, and of coins dug up, and of fragments of history, that this magnificent *Castrum* was first formed, in the time of the Emperor *Claudius*;—near the spot where the Romans most usually landed;—where *Julius Cæsar* is with good reason believed to have arrived after he sailed from the heights near *Dover*;—and where *St. Paul* is supposed to have landed, when he afforded to this country, in the earliest age of Christianity, the first light of the Gospel; *—causing those who were *last* in point of civilization, to be numbered amongst the *first*, in the advantages of Divine Instruction.

Here, in the time of *Claudius*, *Vespasian* was in command; †—who was, indeed, the very first Roman general that truly subdued Britain; after having fought thirty-two battles, and taken more than twenty towns; and after having subdued the Isle of *Wight*. And here *Agricola* first arrived in the time of *Domitian*.

The situation was such, as to have commanded, formerly, in the completest manner, one of the mouths of the once great *estuary*:—*Reculver* having been a similar fortress, in those days, at the other entrance. And the tract between (where now is only the little rivulet, *the Sarr*, or *Stour*, with its bordering meadows), having been the great harbour, where floated the Roman navy; riding in safety, between the British shore, and the then real island, still called the *Isle of Thanet*. ‡

* There are very many reasons adduced, and placed very ingeniously, in a strong point of view, by *Dr. Henry*, to elucidate this fact. See his *History of Great Britain*, Vol. I. p. 196. &c. &c. † *Seutonius*, in *Vita Vespasiani*, c. iv.

‡ On digging a very few years ago, at the foot of *Richborough* hill, the workmen, after removing what was clearly the accretion of the muddy banks of the *Sarr*, as that river diminished more and more during many ages, came at last to a regular sandy sea shore, with

The importance of this port easily accounts for its having been, from the very first beginning of the Roman invasion, so much attended to.

Its walls, we have reason to believe, were begun about the year 43.—The present structure, however, as well as the remains at *Reculver*, appears to have been, in part, built, or at least to have been added to, and completed, by the Emperor Severus,* about the year 205.

broken shells; on which was found a small shoe, or sandal, with a metal fibula. See Boys's History of Sandwich, p. 865.

* Those who wish to see, more at large, the reasons that have been assigned by the learned investigators of this subject, for all these several conclusions; (the detail of which is avoided here, for fear of embarrassing the more immediate object of these observations,) may consult *Battely's Antig. Rutupinae*, p. 45. 6. 14. 73. 75. 78. *Harris*, p. 378, 379. *Leland*, vii. p. 138; and a curious paper of *Mr. Lewis's*, in the *Archaeologia*, Vol. I. p. 79.

Probably *Aulus Plautius*, the Praetor, who was sent into Britain by the Emperor *Claudius*, as the very first Governor, of the province in this Island, was the commander who laid the first stone here; about the year 43:—that very *Aulus Plautius*, whose celebrated wife, *Pomponia Gracina*, was one of the very first persons in Rome accused of having embraced Christianity; and who, having been tried, according to the Roman laws, for so embracing a strange foreign superstition, was pronounced, honourably, to be innocent of any thing immoral. See *Taciti Annales*, lib. xiii. c. 32.

On this occasion it may be added; that another of the first and most distinguished amongst the early Christian converts, was also a British lady. For *Claudia*, the wife of *Pudens*, mentioned by St. Paul in his second epistle to Timothy (c. iv. v. 21), is with good reason thought to be the same identical *Claudia*, who was so much celebrated by the poet *Martial*, for her beauty and virtue; and who is, by him, described, as being both the wife of *Pudens*, and a Briton. See *Martial*, lib. iv. epigram 13; and lib. xi. epigram 54.

And perhaps I ought also still further to add; that, weighing and duly considering all circumstances, we may very fairly conclude, *Helena*, the mother of *Constantine*, the first Christian Emperor, to have been, in like manner, a native of this country.

Here, in Britain, *Tertullian* affirms, (contra Judæos, c. vii.) the Gospel was very soon embraced, even in parts to which the Roman arms had not obtained access. Here it had been planted, even so early as the middle of the first century.

And it ought not to be forgotten; that here also, the true dawn of reformation, and of the restoration of the light of God's Holy Word, first of all began to appear, in the days of *Wickliff*; long before *Luther*, and the other true reformers, came forth in the world.

Here, also, this glorious light, purchased and secured unto us, by the energy, faithful exertions, sufferings, and cruel painful deaths of *Ridley*, *Latimer*, and numerous other excellent, sincere, and pious Christians, has shone for a long season, with increasing strength; notwithstanding all the clouds, and interruptions, arising from malevolence, ignorance, presumption, or error.

It stands on the extreme point of an hill, or sort of promontory, close to a steep precipice eastward; at the foot of which was the haven;—but where now runs the river *Stour*, or *Sarr*;—and there is the greatest reason to think, that the spot on which this fortress is situated, was also originally, in itself a little distinct Island; whilst the Isle of Thanet was such on a much larger scale:—for a narrow slip of marsh near adjoining, between this spot and *Gurson* is, even to this very day, sometimes quite overflowed in wet seasons.*

There are, in this distinguished fortress, still plainly to be traced, all the principal parts of one of the very greatest, and most perfect of the *stationary* Roman camps.

The upper division, for the general, and chief officers;—and the lower division for the legions. And, in the former, the *Prætorium*, with its parade; (sometimes called the *principia*;) † containing the *Augurale*, or place for sacrifices, and for consulting the entrails of victims; and the *sacellum*, or small temple, for depositing the chief ensigns; and especially the eagles; which it is well known were made objects of superstitious worship by the Romans; and which are therefore so justly described, in the Holy Scriptures, by the appellation of being the *Abomination of Desolation*. ‡ A circumstance, that, on this occasion, deserves the more particularly to be remembered; because it is highly probable, that some of the same kind of Roman eagles were once placed in this identical building at *Richborough*, by *Vespasian*, that were afterwards carried by him, against *Jerusalem*, together with the rest of those *very standards* that

These facts demand our heartfelt thanks; whilst any love of our country remains in our breasts: and they therefore may, surely, without impropriety, be remembered with some sort of exultation, on the present occasion; whilst we are contemplating the history of a celebrated spot, where the first light is said to have dawned:—but they ought perhaps, at the same time, for the sake of our best interests, to induce us to pause a moment:—and to consider, whether such advantages have been rightly improved? and whether, in this Island, we remember ourselves rightly?

* Hasted's History of Kent, Vol. III. p. 686.

† This appears from several passages in Livy; particularly from lib. vii. cap. 12.

‡ Matthew, chap. xxiv. ver. 15.—Mark, chap. xiii. ver. 14.—Luke, chap. xxi. ver. 20; which explains the former.

are alluded to, in the tremendous prophecy, concerning the destruction of the Holy City.

In the walls of this castrum also, we have the traces of the *four* great gates.

The *Decuman gate*; or largest gate of all; which took its very name, from being wide enough to permit *ten men at least* to march through it abreast;—and which always conveyed such an idea of magnificent dimensions; that the very word *decumanus* was classically used by the Romans, to signify any thing that was both *huge*, and *fair*;—beautiful, and of *vast size*.

The *Postern gate*; or first *principal gate*; (so called because it was *near* the quarters of the principal officers,) and which was narrow; and constructed of such a particular form, as to be most easily defended.

The *Prætorian gate*; or as it was in this instance, *the water gate*.

And a fourth, on the side nearly opposite to the *postern*; which was the *second principal gate*.

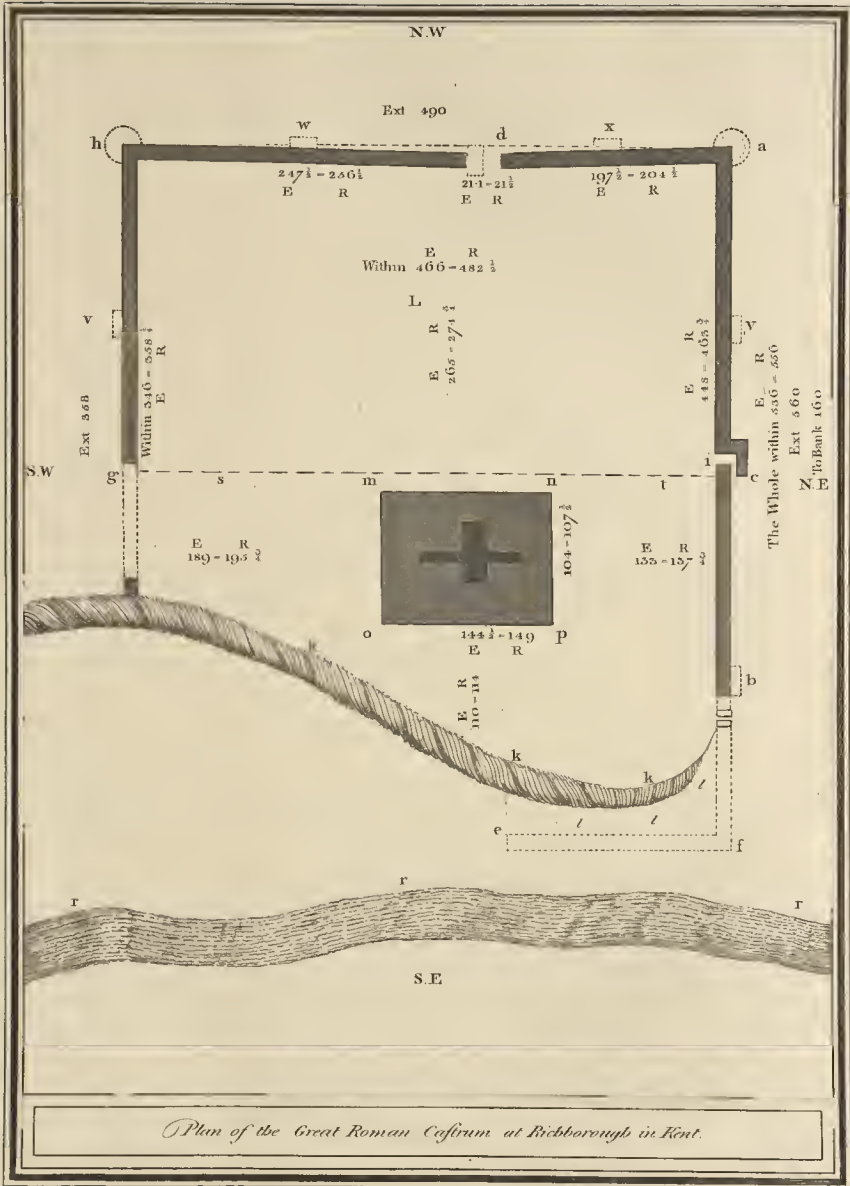
Adjoining to the same walls also, on the outside, have been traced foundations of towers clearly Roman; but which yet, (as plainly appears from some part of their construction,) must have been added, *after* the walls of the castrum were built. A circumstance that shews the more strongly the very high antiquity of the original structure.

The following plans and drawings will serve to illustrate, and explain the whole more particularly.

Pl. XVI. is a general plan of the Fortress.

It appears to have been as nearly of a square form, as the nature of the ground would permit; but yet somewhat deviating therefrom, (as we find was often the case in other instances,) to humour the inequalities of the spot.

On approaching the ruins, the eye is struck with the magnificent appearance of the north-eastern wall (*a b*); commonly called the North Wall; which is, on the outside, in some parts, near 30 feet high, from the ground; and, in many others, about 23:—and is 560 feet, in length; and at least 5 feet, in depth, or breadth, from the lower row of bricks down to the foundation.—Its thickness, at bottom, is, in general, from 11 to 12 feet; but it is in some



Plan of the Great Roman Castrum at Richborough in Kent.

W. Dove Engraver

J. C. Sturtler sculp



parts even thirteen feet.* A manifest proof that they did not, in those days, build by so regular, and exact a rule, as has been the custom in modern times. Its contents also are a proof of the same fact.—For it is constructed indeed of regular facings of alternate rows, of squared stone, and brick, on the two outside surfaces;—but within, between these two uprights, it is composed merely of chalk, rubble, and flints, flung in carelessly, with cement, or mortar spread over them at proper distances, so as to sink into the whole mass;—in which respect it exactly resembles walls constructed by the Romans, in many other places; and particularly the celebrated wall, or bulwark, of *Severus*, in the north; called *his great wall*:—which latter, in many parts, is not above eight feet thick;—and is well known to consist of two regular facings of stone; one on each side:—and to have had the internal space filled up merely by layers, composed first of *loose slaty rubbish*, and then of mortar poured over:—the process being alternately, and regularly repeated; from the bottom to the top; till the whole was finished; and the materials of the country, near at hand (which were *loose slaty rubbish*.) being there made use of; just as at *Richborough*, we find the ordinary materials which that neighbourhood best afforded, (such as fragments of chalk, and of petrified masses full of the shells of *pholas*'s, flints, and fragments of free stone, and grit), to have been, in like manner, promiscuously thrown in.

The foundation, *Mr. Boys* says, was evidently thus laid:—First *two* rows of bolder stones lie on the natural soil, which is a solid pitsand;—then a thin stratum of chalk nodules;—next a *single* row of bolders; and over them another thin layer of small chalk;—all these being without cement:—then bolders again, mixed with mortar;—and so the masonry proceeds internally, with a confused mixture of large bolders, ochre stones, sand stone, and blocks of chalk, with fossil *pholades* bedded therein, and also *balani* on their surfaces;—the whole cemented with a mortar formed of lime, grit, large and small pebbles, sea shells, and fragments of baked bricks. A composition much too coarse and rude to have been ever very fluid.

* In most parts the wall, to a height of about six feet, is eleven feet three inches thick; and afterwards only ten feet eight inches.

† See *Mr. Boys's History of Sandwich*, p. 865.

The outside of this great north-east wall is very beautiful to the eye ; as well as magnificent. It is composed (as far as now remains), in general of seven great, and fair, distinct rows of stone ; each of them very nearly four feet thick :—and each of them consisting, in general, of seven courses of separate stones.

The measure of the great combined courses sometimes varies a little (some being four feet three inches, whilst others are only three feet three inches* in breadth, or rather in depth ;) which may therefore perhaps indicate an intention of forming them about *four Roman feet* in breadth, or depth, upon an average.

These great courses of stone are separated from each other, by six smaller courses of bricks, composed each merely of a double row of bricks, that are about an inch and a half (or an inch and three quarters in thickness) ; but are of very different breadths ; from eight inches to a foot ; and of very different lengths ;—some being fourteen ;—some sixteen inches long ;—and some seventeen and an half ;—a variation of dimensions to be met with in some other Roman structures.—For in the old wall of Verulam, was a brick, now worked up in the wall of the abbey at St. Albans, which is very nearly two feet in length : and there is one at Dover near three feet in length.

The composition of these bricks is also as various as their dimensions.—Some of them are entirely red throughout their whole substance ; (like our modern bricks ;) only of a deeper colour :—some are red on the outsides ; but of a deep blue within ;—the internal substance being formed of a different earth from the outside ; (perhaps for the sake of sparing the better and scarcer material.)

And here again we find a great similarity to other Roman works ; for in the walls of Chesterford, Verulam, and Silchester, are exactly the same varied appearances.

Some of the bricks also, here at Richborough, are of a yellow colour ; having plainly been composed only of mud and clay taken from the neighbouring shore. And some of these latter might possibly have been merely dried by the sun ; but how the red ones should become of *that colour*, without the aid of fire ;—or how

* See the account published by Mr. Boys himself, in his curious History of Sandwich, p. 366.

any (except the yellow ones) should have been dried in the sun ; as has been hastily conjectured by some antiquaries, I cannot comprehend.

Let them have been formed how they will ; the whole produces still a very beautiful effect to the eye.

The structure is every where, uniformly, of this sort of style ;— except in some very few parts ; where reparations have plainly been made in *Saxon times* ; and with squared stones of a much smaller size ; and with herring-bone work.

The external appearance, (as the ruins remained in the year 1775,) is represented, Pl. XVII. fig. 2. where the different dimensions of every part of the structure are most exactly distinguished.— The very measures of every part, having been annexed in the original drawing ; but being now left out in the engraving, to avoid the disfiguring of the plate.

The several alternate rows, or courses of stone and brick, (here described, as appearing in this wall,) were by the Greeks, who lived in Roman times, called *Θεμελιαί* or *Θεμελιαί* ; and are the kind of ornaments alluded to by St. John, as being so highly beautiful, according to every one's apprehension, in his days ; when, in his emblematical representation* of the walls of the Holy City, in the Prophecy of the Revelations, he speaks of such, being formed of precious stones. The word, *Θεμελιαί*, is in our translation of the passage, very improperly rendered, as far as relates to a consistency with our modern ideas, *foundations* ; instead of *courses* : and this mis-translation occasions much confusion in the minds of most persons, who attempt to read the Prophet's sublime description.

Nevertheless the reason why these alternate rows either of brick, or of smooth flat stones, were antiently, called *Θεμελιαί*, or *Θεμελιαί*, *foundations*, (though the word seems now so uncouth, and inapplicable, in our ears,) is yet apparent enough. For whoever examines Roman walls attentively, will find, that most usually the broader alternate rows of rude stone, or flints, or rubble, and mortar, were evidently constructed, merely by having the whole mass flung carelessly into a great *caisson*, or frame of wood, whose interior *breadth* was that of the wall ; and whose *depth* was that of the space between

* Chap. xxi. ver. 19.

the alternate rows of bricks; and whose length was sometimes more, and sometimes less, just as suited convenience: and that the parts thus reared, one at the end of another, on, and over each row of bricks, were united together afterwards, merely by means of very small loose stones, and mortar, thrown into the narrow space left at the ends between them.—As therefore these *caissons* were removed, up from one row of bricks or smooth stones to another superior row, in constant repetition, according as the wall advanced in height; and were placed successively upon every row; those substantial rows of bricks regularly placed, might very well be called *Θεμελίαι*, or *Θεμελίαι*, or *foundations*; because, indeed, such they really were, the whole way up, to those identical building frames.

And, indeed, I have sometimes thought, that those numerous small square holes, found in some of the Roman walls, and even at *Richborough*, perforating their substance, at different heights, were left by the very timbers made use of to support these *caissons*.

It is not, however, meant to be here asserted, that all Roman walls were just so built;—because, where the outsides of the alternate courses were not to be left quite rough; but were to be adorned with a smooth facing of regular squared stones; as many of them now appear to be; and were moreover of great thickness; it is very probable such facings, on each side of the wall, might be first regularly raised, by masonry, in lieu of the *sides of caissons*; and then the confused heap of stones, rubble, and mortar, might be merely thrown in between those strong facings.

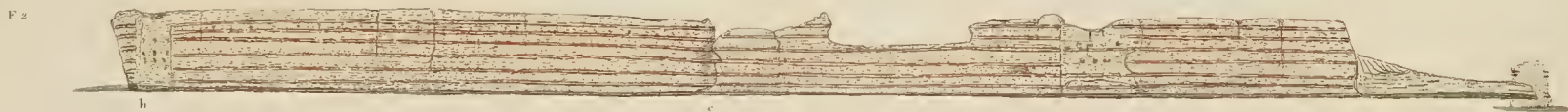
The entrance through this magnificent north-east wall at *Richborough*, into the great castrum, is at (c.) through a *side gate*, called, in the time of the Romans, one of the *principal gates*; (because it was nearest to the quarters of the *principal officers*;) and in subsequent times, the *Postern gate*. But, in consequence of the peculiarity of its construction, it can hardly be distinguished from the rest of the wall externally.

Its place is marked at (c); both in the general plan, Pl. XVI.; and in the elevation of the wall, Pl. XVII. fig. 2; and its form is explained, more at large, in Pl. XVIII. fig. 1, and 2: the former of which is the plan; and the latter the elevation of the entrance,

B
The W. Wall



The N. Wall



The S. Wall



External appearance of the Walls of Bebborough

J. C. Stabler sculp

W. Howe Engraver

Back of
Foldout
Not Imaged

seen on the side (*c z*,) where you first enter, on approaching the castrum.

The passage of entrance (*c*), at this external part, is only about three feet ten inches wide ; or at most (taking away the set-off,) a little more than four feet ; but, on turning at (*q*), its width is increased to about seven feet eight inches ; and continues such, in a straight line, to the inside of the camp at (*i*).

The bottom of this entrance was formed of solid stone work, as appears in the elevation, fig. 2 ; and contained a drain (*i, q, c,*) about 1 foot 8 inches wide, that was made to wind, according to the turning of the passage ; and was undoubtedly covered over with a pavement of stone, nearly to the height of the first row of brick that appears in the wall ; which, like all the other rows of bricks, may be observed *here*, to have been confined merely to the two external surfaces.

The passage, as may be seen by the dimensions given in the plan, was 10 feet 4 inches long in one direction ; and 15 feet in the other direction ; and the great wall was here 10 feet 8 inches thick, and the lesser wall 6 feet 4 inches.

On passing through this entrance, the whole internal area of the camp is seen at one view : which is now, indeed, a mere corn-field ; having an hillock, covered with briars and thorns, in the part where stood the Prætorium. But as the whole of the stone work of the foundation of the Prætorium, was open to the eye some years ago ; so it has been again searched, and examined, with the utmost care ; and measured by Mr. Boys, very recently.

From the inward side of the gate (*c*), to a spectator standing at (*i*), the appearance of the walls all around is still exceedingly grand ; though, on account both of the natural and artificial elevation of the adjacent soil, these walls are not so lofty, by many feet, *within*, as on the outside : being in some parts only about 10 feet high.

This great north wall has, however, been much better preserved on *the north side*, than on the south, as is, indeed, usually the case with the remains of most very antient buildings.

How much higher all the walls, in every part once were, manifestly appears from their irregular broken tops.

In the north west wall, (usually called the west wall,) on the

right hand, at (*d*), is seen the open space, where once was the great *Decuman gate*.—And that this is no mere conjecture is most certain, not only from there being no fragments of any wall whatever remaining in the open space; but also from a discovery that has been made by Mr. Boys, of a most complete pavement of stones, laid in it, similar to the pavement of the Postern gate; and of a peculiar breadth, which perfectly corresponds with a breadth proper for a *Decuman gate*.—The construction of this pavement, as it appeared when the whole was examined; together with the remaining fragment of the upright wall, on one side, is represented, Pl. XIX, fig. 1.

It was 5 feet and an half in depth, or thickness; which gave it sufficient solidity:—was 24 feet 11 inches in length; by which means it passed sufficiently beyond the great wall on both sides:—and was 21 feet 1 inch in breadth; which afforded exactly sufficient space for *ten men* to march abreast; a circumstance from whence this great and principal gate, in every Roman camp, had originally its name.

Both *Cæsar*, and *Livy*, describe the *Decuman gate*, as fitted for violent and sudden sallies, and eruptions upon the enemy;—and as the easiest also to be stormed, by an enemy; on account of its great width and extent, which must occasion some degree of weakness;—and as therefore deriving its security chiefly from the guards; and not from the mode of its construction.

Thus we read in *Livy*,*

“ Interim in castris Furius Consul quum primo quietus ob-
dionem passus esset, in incautum hostem *Decumanâ portâ* erupit:
“ et quum persequi posset, metu substitit, ne qua ex parte altera in
“ castra vis fieret.”

Which passage most fully implies *both* circumstances:—the ease with which a *sudden sally* was made through this gate; and the danger of leaving it weakly guarded by too rash a pursuit, lest the enemy should in the mean while *rush in*.

And, in *Cæsar's Commentaries*, we find an instance of an enemy, in such manner, actually suddenly rushing into a camp; when this gate was not sufficiently guarded: for he says,† (speaking

* Lib. iii. § 5.

† De Bello Gallico, lib. iii. § 25, 26.

of the manner in which the Romans under Crassus, forced their way into a camp that had been formed by the *Aquitanians*, just as they had been originally taught by Sertorius).

“ Equites, circuitis hostium castris, Crasso renuntiaverunt, non eadem esse diligentia ab *Decumanâ portâ* castra munita, facilemque aditum habere.”

And he then informs us, that the cavalry of Crassus did, in consequence of this information, contrive, by surprise, to ride impetuously in, through this very gate, and to make themselves masters of the whole munition.

His words are, “ longiore itinere circumductis, ne ex hostium castris conspici possent, omnium oculis mentibusque ad pugnam intentis, celeriter ad eas, quas diximus, munitiones pervenerunt: atque his prorutis, prius in hostium castris constiterunt, quam plane ab his videri, aut quid rei gereretur cognosci posset.”

But no such kind of sudden *irruptions in*, could well have been made, through any gate that ever was at Richborough, at (*e*); though every one may clearly perceive, how likely they were to take place, in any Roman castrum, through such a sort of entrance as the great one at (*d*).

The possibility of such events, perfectly accords with the breadth of the pavement, and with the other apparent remains.*

Standing just within the Postern, or first principal gate (*c*), at (*i*);—and turning our view, from the great north-west wall, and

* It has given me very great concern, to find myself, since the writing of these sheets, under a necessity of pointing out a little error, in that very valuable and useful work of General Roy's, published by the Society of Antiquaries, most deservedly in such a splendid manner.—But, at the same time, it is some little satisfaction to reflect, that it is no depreciation to a work of excellent merit, to endeavour to render it still more perfectly correct.

The error, is one that I myself formerly fell into;—the *mistaking* THE PRÆTORIAN GATE of the Roman camp, FOR THE DECUMAN. And the error may be corrected even from those very passages of Livy, and Polybius, which General Roy himself has cited; whilst, at the same time, it appears clearly, from those very passages, in what manner both himself, and others, have been led into such mistake.

He unavoidably hesitates, in the very beginning of what he says on the subject: and even fairly confesses, (in p. 46,) that there is confusion, amongst commentators, concerning the gates; in consequence of Polybius not having told us, *what* the precise names of the several gates were: some mistaking the rear of the camp, for the front.

In order to set the matter right, as he apprehended, he cites two passages: but which

from the Decuman gate on the right, towards the left; we there indeed, at present, see no wall at all; but look over a steep precipice, upon the marshes, which were once *the sea*.

Here, however, there is great reason to believe, besides the defence which the precipice itself might afford, there was, at the

unfortunately, (when fairly considered in themselves, and especially when considered with those others which have just been mentioned) prove directly against him.

One of them is (p. 47) from Livy (lib. x, cap. xxxii xxxiii): who tells us, "that the Sannites, having in a fog attacked the camp of the Consul *Atilius*; entered it by the *Decuman gate*, in the rear, and surprised and slew the *Quæstor* in his quarters. *The Consul* awaking, ordered the *Lucanian*, and *Suessian* auxiliary cohorts, to defend the *Prætorium*, while he led some companies of the legion, through the great street of the camp, to succour the quarter attacked. These having assembled in a hurry, before their arms were ready, retired at first, and thereby suffered the enemy to penetrate to the very centre of the camp. But the Consul having called to them, they advanced and drove the Sannites out again at the *Decuman gate*."

I have inserted the very words, just as they are translated by General Roy himself.—And surely, even from them, nothing can be more manifest, than that the *Decuman gate*, in the rear of the camp, was not that nearest to the Consul's tent; which must have been in the *Prætorium*; but was indeed a gate at the very furthest end of the great street from thence; as, through nearly the whole of that great street, the Consul (who was at first so far from the attack, that he was not awakened by it,) through nearly the whole of that STREET the Consul passed, to succour the quarter attacked.

Besides this; from the quarter first attacked, we are told the enemy had penetrated even to the very centre of the camp.—But had the *Decuman gate*, been really that nearest to the *Prætorium*, as General Roy supposes; they could not have done so, without first passing by the *Prætorium* itself; and by the Consul's tent; even according to the very plan given by General Roy, Pl. IV.

We are, therefore, under a necessity of concluding, that he has fallen into the very mistake, which himself previously mentions: that of mistaking the front of the Roman camp for the rear. And that in very truth; the head, or front of the camp, properly so called, was where in common sense it ought to be; on the part nearest to the head quarters;—nearest to the *Prætorium*; and to the Consul's tent; who was therefore (in the instance alluded to,) not disturbed for some time, by this irruption; but continued asleep;—though the enemy had penetrated to the very centre of the camp.—And that the rear, and the *Decuman gate* mentioned, was indeed just where we might expect, in common sense it should be; that is, beyond all the lowest orders of the army; and at the very further end of the great street, going from the *Prætorium*, through the whole camp; and through which street therefore the Consul actually marched, to attack the assailants who had broken in.

The other passage, shews plainly, how, and in what manner General Roy fell into this mistake; which after all, does not materially affect the exceeding curiosity of his several investigations, and descriptions.

It is that, wherein *Polybius* says, "that the tents of the *Tribunes*, were pitched so as to

eastern corner of the camp, both a continuation, and return of the wall (*bfe*), from the top of the precipice down to the shore; leading, by means of a sloping fortified descent (*lll*), to (*e*); where we may rest persuaded was a *third gate*, properly called the *Prætorian gate*: unless we will suppose (what may really have been the case) that a great part of the precipitous bank here has been broken down by time, and carried away; and that the walls of the castrum were once continued in straight lines all round, on a then existing level, high above the present bank of the adjacent stream; in which case, the *Prætorian gate* may be understood to have existed in such wall, directly opposite to the Decuman gate.

It is well known that the gate which obtained the name of *Prætorian*, in every Roman camp, was always placed, both nearest to the Prætorium, and General's quarters; and also turned towards the enemy:* or on the side most liable to be attacked. And therefore, in this celebrated station for the protection of the coast, it

“have the Prætorium *behind*; and all the rest of the camp,” that is to say, the whole body of the army *before them*. And from hence he too hastily concludes, that what was *before them*, must be the *front of the camp*;—but this conclusion does by no means fairly follow.—For the description only intimates; that the Tribunes' tents being placed between the Prætorium, (or the head quarters of the General), and the body of the camp; that therefore *the fronts of their tents* were placed so, as to front the main body of the camp; without any respect, in that description, to which was *the front of the whole camp itself*; or which *its rear*.

I must add further; that a third passage, cited by General Roy himself (p. 47,) from Livy (lib. xxxiv. cap. xlvi. xlvii.) plainly shews in reality, that, his error further arose, from supposing the *Prætorian*, and the *Quæstorian* gates, to mean the same thing; whereas the *Quæstorian* gate seems indeed to have been *the Decuman gate*:—(as is most plainly said, in the learned note to this very passage, in Crevier's Edition of Livy, Vol. v. p. 264,) and *the Quæstor's quarters* seem actually to have been in the *rear* of the camp, and *by the great Decuman gate*; whilst the Consul's, or the Prætor's quarters, were at the Prætorium:—and this circumstance also, well accounts for the *Quæstor's* being instantly killed in both instances of storming the camp;—and for the *Consuls*, nevertheless having leisure, in both instances, to rally the troops: one of the Consuls having in one instance, been actually for some time remaining asleep before he knew of the assault.

Another passage cited by General Roy (p. 48) from Livy (lib. xl. cap. xxvii, xxviii,) shews further, that, on a general sally, the cavalry were to rush out of *the Quæstorian gate*; which shews it must have been *the great wide gate*; or in other words *the Decuman gate*;—such as that above described at Richborough: and such as we shall hereafter find was also at Pevensey; and has there still magnificent remains existing.

* Vegetius, lib. iii. sec. 8.

was turned towards the sea, or rather *æstuary*;—and was what would have been called, in later ages, *the sea gate*.

The precipice itself now runs in the direction marked in the plan (*kkk*).

And (*rrr*), shews the direction of the little river *Stour*; the only remains of the once great port and æstuary.*

Looking straight forwards from the entrance (*cī*); there appears, on the opposite side of the camp, a great breach in the wall at (*g*): only a very small fragment being left next the precipice. And somewhere in a part of this breach, (probably near (*g*),) was unquestionably *the fourth gate*; or as it would have been called, in Roman times, *the second principal gate*; nearly opposite to the other that is at (*c*); and, like it, near the quarters of the principal officers.

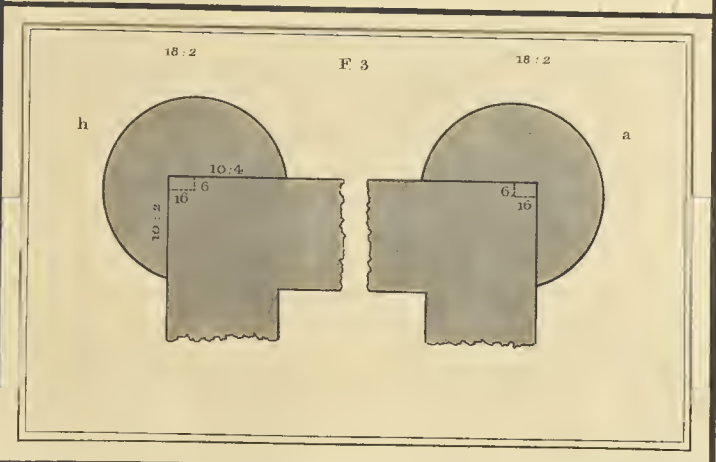
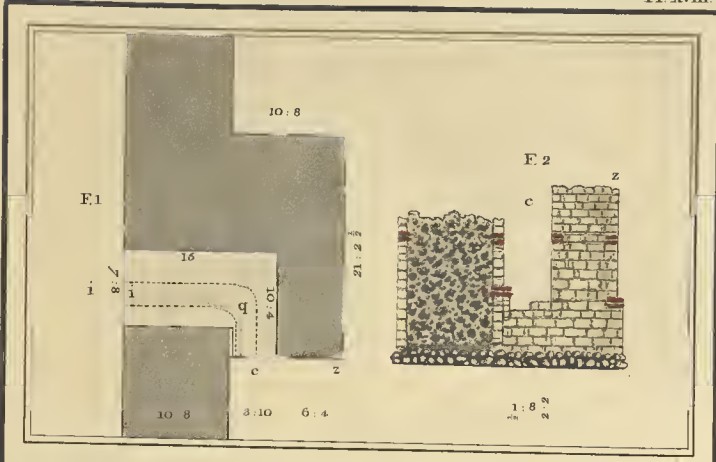
The outside appearance of the ruins of the north west, or west wall, is shewn, Pl. XVII. fig. 1.—And that of the south west, or south wall, fig. 3.—And here in these elevations, as well as in that fig. 2. of the north-east wall, the same letters (*gdc*) denote the places of the gates; as in the plan.

On examining the ground, round the outside of the walls, in 1786, there were discovered, at the north, and west corners, the foundations of two round towers (*a*) and (*h*).

They are represented on a larger plan, (Pl. XVIII. fig. 3,) for the sake of shewing the peculiarity of their construction.

* Mr. Boys, in a recent publication,† long since my last conversation with him, and since his kind communication of his original drawings; seems to have been induced to believe, that the camp was once a complete regular parallelogram; and that the part beyond the precipice has only, in later ages, been washed away.—But with regard to that matter I cannot help still entertaining some doubts; though the fact might possibly be so: for it is difficult to believe that the ground, beyond the precipice, could be washed away, *after* the sea had entirely left the shore;—and when it had obviously been retiring by degrees, from the time the fortress was built, till it left the *Stour*, or *Sarr*, only that poor little contemptible stream it now is.—This is a far different case from what has happened at *Reculver* castrum; the other mouth of the *portus Rutupinus*; where the sea has indeed been continually beating, and washing the cliff away, and still continues to do so.—But at *Richborough*, there is no more reason to think the sea has washed any thing away, than at *Burgh Castle*; where the same sort of inland cliff terminates the same sort of Roman castrum.

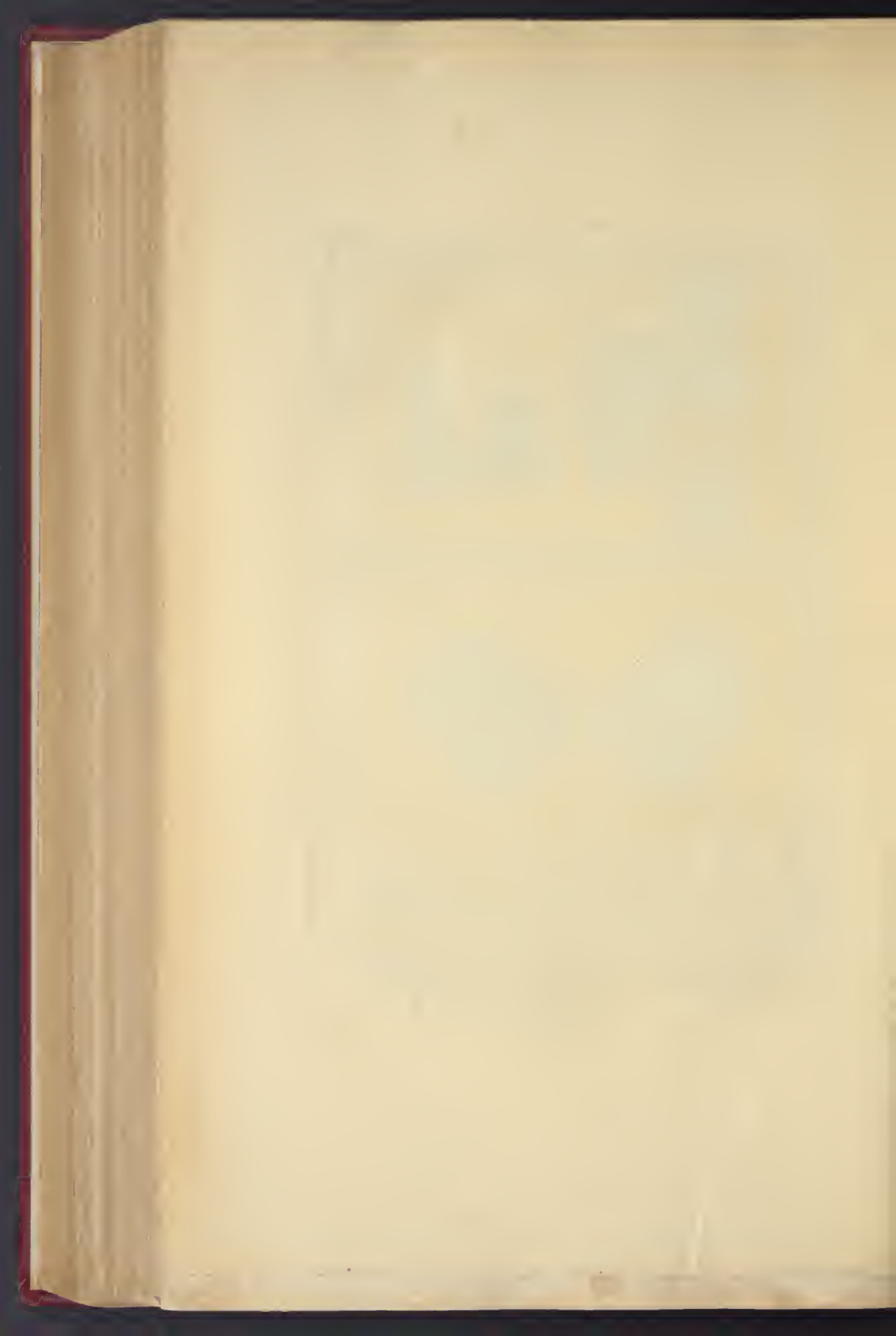
† Boys's History of Sandwich, p. 366.



F. 1 & 2. Plan & Elevation of the Postern Gate in the North East Wall at Richborough.
 F. 3. Plans of the North & West Round Towers at Richborough.

W. Beyer Esq. del.

J. C. Stadler, sculp.



They were above 18 feet in diameter, and of solid masonry; but had not their centres exactly in the corners or angles of the wall; but irregularly, somewhat within those angles: as is shewn in the plan. The centre of the tower (*a*) being 16 inches within the NE wall, and 6 inches within the NW wall: and the western tower (*h*) being placed in a similar manner.*

Under the tower (*h*) was found a large dark-coloured coarse jar, containing about three quarts; which stood just above the sandy bottom: and under the tower (*a*), was found part of an human skull.

There were discovered also the foundations of a square tower (*w*), on the south-west side of the great entrance, or Decuman gate (*d*);

And another square tower (*x*), between that gate and the north corner of the wall.

There was also such another square tower at the east end of the great north wall, at (*b*). And there appeared to have been two others; at (*v*), and (*y*), opposite to each other.

But it is very remarkable in all these towers, that the *Θεμελια*, the courses, or rows of brick, ranged differently in *their* construction, from what they did in that of the original wall of the Castrum; and that they, therefore, were manifestly built *after* the erecting of the original wall; though they were as manifestly of Roman design; as appears from these very alternate courses. They seem, in short, to have been added about the time of the Emperor Severus, as an addition to the walls built in that of the Emperor Claudius.

This matter may be better explained by (Pl. XIX. fig. 2.); which represents the junction of the tower (*v*), with the south-west wall.

(*o*) Represents the wall; and (*l*) the tower; from an exact drawing; whence we may here perceive, not only that the tower was added *after* the wall was completed; but that the foundations of the tower were not laid so deep as those of the great wall to which it adjoined.

In like manner, on examining the foundations, and the part

* N. B. The figures in the plan 10 feet 4 inches, and 10 feet 2 inches, only denote how far the corner of the angle of the walls projects into the plan of the tower.

where the tower (*b*) joined the great north wall, at the eastern end; (of which part, as it appeared on the outside, a view is given, Pl. XIX. fig. 3.) it was clearly discovered, that the tower there situated could never have had any connection, at the bottom, with the great wall itself, except a little under the figure (*x*); and above the lowest double course of bricks in the wall; in which case the foundation of the tower must, there again, have been just so much higher than the foundations of the great wall.

These towers, therefore, were not only subsequent additions; but were so cautiously added, without diminishing the strength of the original inclosure, that in case any one of them had at any time been taken by besiegers; or even destroyed; the Castrum itself would still have remained as entire as before; and without breach.

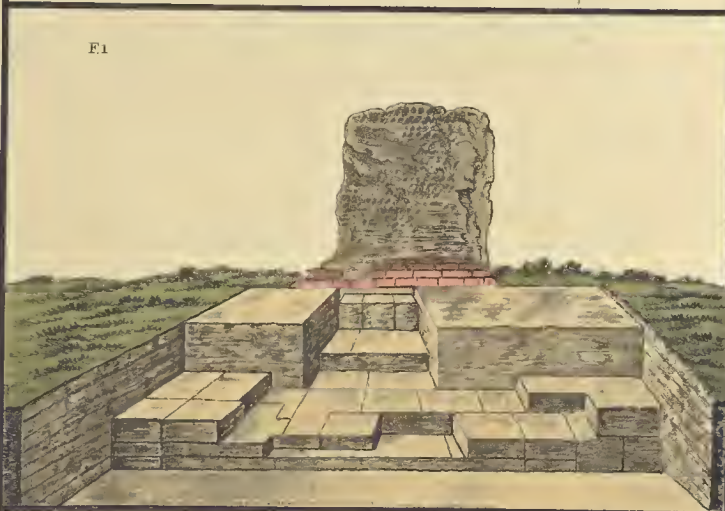
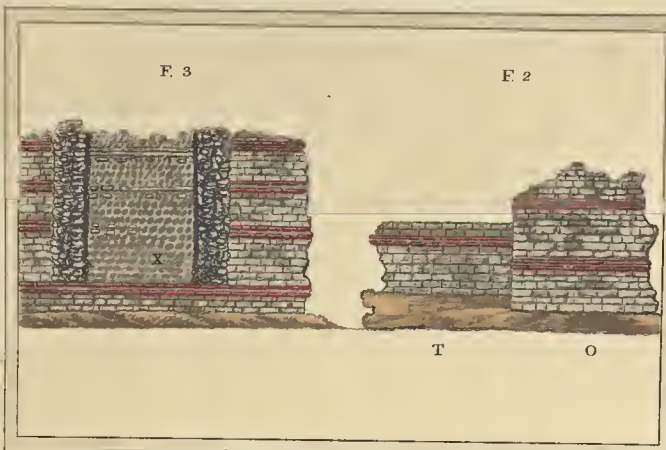
Let us now turn our attention to the area inclosed.

If we suppose a line (*ts*) to be drawn straight forward from the gate (*i*), and to be carried on quite through the camp, it will divide the whole space, very nearly in the manner in which the two partitions of the *upper* and *lower* camp were originally formed. And at the one extremity of this line at (*ic*), was one *principal gate*; and at the other end at (*g*), was the other *principal gate*.

On the right hand of this line *ts*; (*L*), was the *lower camp*; where the tents, and huts of the common soldiers, were disposed in streets. The Roman horse, (*the Equites*), being placed in the midst;—next to them, on each side, the troops called *Triarii*, and *Principes*;—and beyond them, on each side, the *Hastati*; and the mercenaries, or foreign troops.

And on the left hand of this line (*ts*), was the *upper camp*; in which were the tents of the principal officers; the pavilion of the general; the *Prætorium*, with the *Augurale*, and place for sacrifices; and the tents of the young *Patricians*, and noble volunteers, who were called *Imperatoris Contubernales*.

In this upper camp, we still find a most perfect and extraordinary remain. For at (*mno p*), in the very spot where we may be assured *the Prætorium* must have stood; has been discovered, at the depth of a few feet beneath the present soil and rubbish, a solid regular platform, 144 feet, 6 inches in length, and 104 feet in breadth; being a most compact mass of masonry, composed of flint



E1 Platform of Stones in the Western Entrance, or Great Decuman Gate, at Ricborough.
 E2 Junction of one of the Towers with the South West Wall at Ricborough.
 F3 Junction of another of the Towers with the Great North Eastern Wall near the East end.

J. C. Stadler, sculp.



stones and strong coarse mortar, with a coat of the same mortar spread over the whole 6 inches thick, to reduce the surface in every part to a perfect level. This great platform is 5 feet thick in depth, and as hard, and entire, in every part, as a solid rock. Mr. Boys was at the expence and trouble of mining *eleven* feet underneath it: and found it every where impenetrable by any instrument whatever. And, as to the upper surface, the coat of mortar was found to extend regularly quite to the edge all around; and to have had no breaks, or indication of any building erected upon it, except that which appears in the form of a cross in the midst. There cannot remain a doubt, therefore, but that this was in truth the *great parade*, or *Augurale*, belonging to the Prætorium;—where was the *Sacellum* for the eagles, and ensigns;—and where the sacrifices were offered.

And indeed, on removing the earth around, to clear the surface, there were found, boars' tusks; cinders; and wood coals; and other indications of remains of sacrifices; besides pieces of brass, iron, and lead; and pieces of broken vessels: and flat pieces of alabaster, with numeral letters on them.

The elevated part, in the form of a cross, in the midst of this platform, has puzzled many antiquaries exceedingly;—but is surely, nevertheless, still very intelligible. It is a second compact mass of masonry, placed upon the former; and made to rise almost 5 feet above the first great platform: and its dimensions plainly denote its original designation.—It is 46 feet 8 inches in length; and 22 feet in breadth, in that which forms the most conspicuous, and most considerable part;—whilst the rest, (or the transverse of the cross), consist of two *alæ*, or wings; each 32 feet 6 inches in length, and 7 feet 6 inches in breadth;—so that the dimensions of these foundations, could not, with any sort of propriety, have been those of transverse or crossing walls in any larger building; (and especially as there are not the least traces of any adjoining walls, or of any continuation of walls, on the great platform all around;) neither do they accord with any possible imaginary idea of a *Catholic Cross*, here erected in latter ages (although this mass has gone by the name of *St. Austin's Cross*, in the days of superstition).—But the whole appearance perfectly agrees with the idea of a *Sacellum* having

been built here; for the reception of the Roman eagles, and military standards; close to the *Prætorium*; and in the midst of the *Augurale*, or platform devoted to sacred superstitious ceremonies.

This idea is strongly confirmed, by further observations.—For, whilst the body and interior substance of this cross is composed of the same materials with the great platform on which it stands; the outside, all round, is found to be covered nicely with squared stones in the several facings;—denoting these to have been the *outsides* of upright walls.

Now, supposing the upright walls of the building erected upon this elevated foundation, to have been 1 foot and an half in thickness, which was quite sufficient for the purpose; there would then be formed a sort of room, or *sacellum*, 43 feet 8 inches in length; and 19 feet in breadth; composing the body of the building;—and fit for the reception of the *principal eagles* of the several legions to be placed at the upper end;—whilst the two wings, would be each 31 feet in length, and 4 feet and an half, in width;—of proportions unfit indeed for any other purpose; but admirably well adapted to receive, as mere cells, the numerous military standards of the subordinate divisions, to be placed leaning against the walls; from whence they might at any time be speedily taken out, in regular successive order, on the issuing of the command from the *Prætorium*.

Pl. XX. fig. 1. shews the plan of this building, or *sacellum*, as it seems to have existed originally.

And fig. 2. shews the elevation of the foundations of this building in a transverse direction, from SE to NW, above the great platform of the *Prætorium*, and *augurale*; and also the elevation of that platform itself.

That a Christian chapel was afterwards here constructed; and that even by the direction of Augustin himself, as soon as he had influence sufficient in this country to undertake such an attempt, is very probable: because in the early ages, it was the uniform practice of the first Christians, in many countries, to convert places that had been dedicated to Pagan superstition, into places of assembly for Christian worship:—of which fact we find many instances in the Lives of the Fathers.—And hence, therefore, the

building here erected, which had first been the *Sacellum* of the Roman Prætorium, might easily, in after ages, be better known by the name of *St. Austin's Cross*,—it having, *by him*, been converted into a Christian chapel; but of its original designation there can be little doubt.

One further observation remains to be made.

As there was all this extraordinary care taken to form the foundations of this building, and of the platform on which it stands; insomuch that they now defy the devastations of time, and even the edge of the tool,—so the very ground plot, of the whole *Castrum*, had originally been smoothed, and prepared to a considerable depth, to keep the whole firm and compact, over the natural soil, which is here composed of sand mixed with clay.

In digging under all these foundations, to make these various discoveries, was found, at the bottom of all; (and therefore plainly in a place where it must have been lost, and buried *before the works were first begun*,) a little bronze figure of a Roman soldier, playing upon a pair of bag-pipes.

This great curiosity was given to me by my friend Mr. Boys; and is now in my possession.—And as it most clearly ascertains, from the place, and manner in which it was found, and the time when it must have been lost, the use and existence of this instrument amongst the Romans, on their very first arrival in this Island, I could not neglect to give a very exact representation of it, Pl. XX. fig. 3.—both in front, and on each side.

It seems to have been part of the *Ephippia*, or horse trappings, of some Roman knight; and to have been designed to be suspended before the breast of the horse; hung on, by leathern thongs passing through the two cavities behind the pipe; and secured, at bottom, by another thong passing through a similar cavity in the brass work, beneath the feet, which part is now broken off.

The whole equipment of the figure is most curious;—the precise form of the bag, and pipes;—and the manner of holding, and managing them; the helmet;—the purse, or *antient scrip*, on one side;—and the short Roman sword, or dagger, on the other;—and the coat, and belt.—And the whole is a proof, that the *bag-pipe* was originally no Scotch, but a Roman instrument;—a fact that is

also strongly corroborated by the bass-relievo at Rome, mentioned by *Dr. Burney*: where a Grecian sculptor has given, in like manner, the representation of this instrument.*

It is not unlikely that the Scotch borrowed the modern bag-pipe, from the old Roman double pipe;—as they did *the plaid*, and the mode of wearing it, from the Roman *toga*.

However this may be; the discovery of such a bronze, in such a place, is a fact that ought not to be left unnoticed, on this occasion.—With the mention of this circumstance, therefore, we will finish the description of this antient, and interesting fortress, only just observing, at the same time, that a similar little bronze was found on the outside of the walls; † and that other bronze figures, have also been found here; particularly a figure of Mercury:—and that a vast quantity of Roman coins, of such kinds as might be expected in a camp, that is, of small ones, of little value, have also been frequently dug up. ‡

The next Roman fortress that deserves to be selected, as an object of our attention on the present occasion; is that of *Portchester*, in Hampshire;—another great, and originally most antient port of this Island; where, therefore, we have certainly every reason to expect the meeting with works of the highest antiquity.

* See also Pennant's *Voyage to the Hebrides*, p. 302. And *Tour in Scotland*, Part II. Additions, p. 33.

† See Mr. Boys's *History of Sandwich*, p. 868.

‡ For the sake of comparing this fortress die more completely with other Roman castra mentioned for the illustration of the present subject; a plan of it, upon a much smaller scale, is added again in Pl. XXVIII. fig. 6, where letters are added, corresponding with those in the other Plans.—And (*d*) shews the great Decuman gate.

c g, The side gates, called the *Principal gates*.

e, The place of the *Prætorian gate*; and

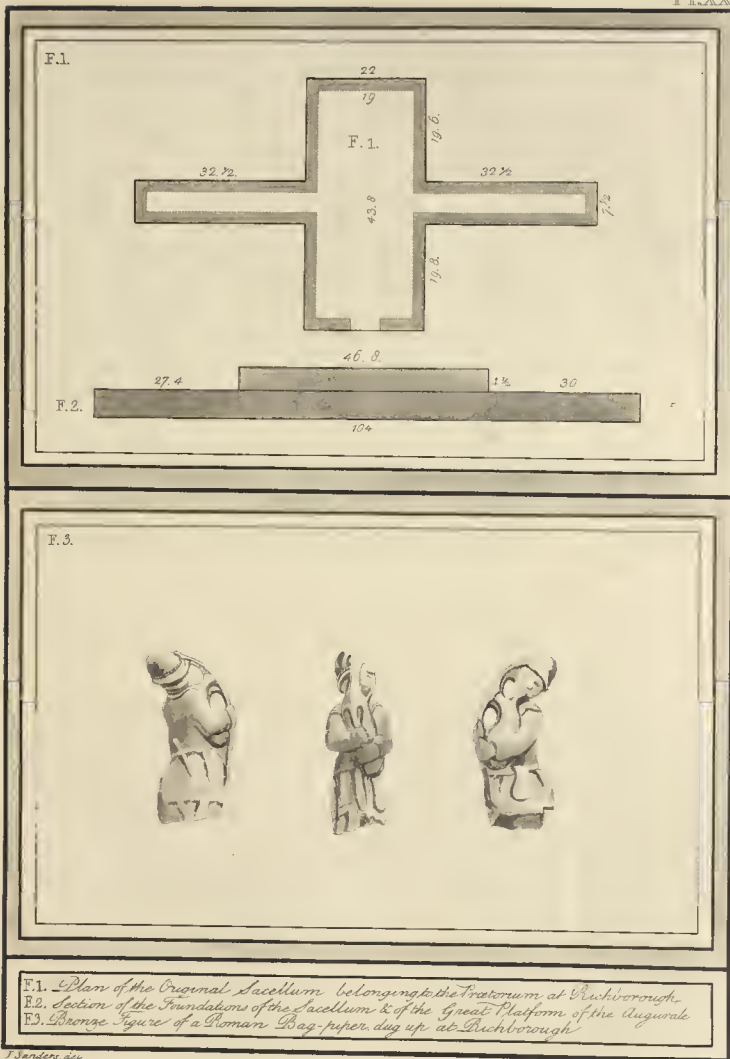
P, The *Prætorium* itself; and

r r r, The remaining little channel of the river *Sarr*, or *Stour*; and

h h h, The steep bank, which either secured the fortress on that side originally; or else has been formed by a part of the castrum being washed away.

It deserves also to be here remarked, that as this fortress was one of the first munitions of the Romans in this Island; so, in the later period of their dominion here, it was one of the most principal forts, that was appointed for the defence of the coasts against barbarians, and was, as such, put under the command of the *Comes Litteris Saxonici*. ||

|| *Horsley, Brit. Rom.* p. 472.



F. 1. Plan of the Original Sacellum belonging to the Proetorium, at Rushborough.
 F. 2. Section of the Foundations of the Sacellum & of the Great Platform of the Uguvale.
 F. 3. Bronze Figure of a Roman. Bag-paper dug up at Rushborough.



Here, tradition says, (as Stow reporteth,) was an old British fortress, called *Caer Peris*; formed by *Gurgunstus*, a son of *Beline*, in the year 375 A. C.*—and here, afterwards, *Vespasian* is, by some of our historians, said to have landed; † though others suppose him, on less good grounds, to have landed in *Torbay*. ‡

* Stow's Annals, p. 12.

† Mag. Brit. l. 473.

‡ *Vespasian* certainly came into Britain, at the head of the second legion, surnamed *Augusta*, in the year A. D. 43; § but concerning the actual place of his first landing there are great differences of opinion: for some of the British historians speak positively of his having been previously repulsed and driven from *Richborough* in Kent, and of his having then landed at *Totness* in Devonshire: and *Holinshed* adopts this idea. || All agree, however, in speaking of his great actions in this country; which, with his being, on account of the expedition into Britain, brought forward by *Claudius*, were unquestionably ¶ the foundation of all his future success, and glory. *Henry Huntindon* gives us an account ** of his adding the Isle of *Wight* to the Roman dominion. And we are told he commanded all the southern coast, and engaged the Britons in thirty several battles. †† Let the fact then, as to his first landing, be how it will;—yet since he could neither command the coast, nor make himself master of the Island of *Wight*, without being in possession of *Portchester*, we may be assured that here he made his abode during a part of his stay in Britain: and that at *Portchester* were unquestionably planted his tremendous standards.

To a contemplative mind, therefore, at any time occupied in meditation, on this classic ground, it cannot but present an interesting and an awful scene for the imagination; that *here* stood, in his first exercise of great command, *Him* who was afterwards the best of emperors;—*Him* who was destined to be the avenging instrument of the wrath of Heaven, on the land of *Judea*;—*Him* whose conquering legions, after they had laid waste *Calilee*, ‡‡ with the most horrid desolation;—and caused the lake of *Gennesareth* to flow with blood; afterwards stood encamped on the *Mount of Olives*; §§ and planted those dire eagles, the desolation of abomination, on the very spot, as it should seem, where our BLESSED LORD had sat, *** when he foretold to his disciples the destruction of the Temple; and gave that well known intimation, concerning the sign to come;—the remembrance of which, enabled the first Christians, on the Roman armies encompassing the Holy City, to escape from *Jerusalem*: and to avoid all the horrors of the siege.

It is a fact which ought never to be forgotten; that not one Christian perished in the

§ Tacit. Hist. lib. iii. cap. 44.—Notitia, cap. 38.

|| Vol. I. book iv. p. 36.

¶ Tacitus, Vita Agricolæ, sec. 13.

** Lib. i. p. 302, 303. See also Tacitus, Hist.

†† Suetonius, *Vespasianus*, cap. iv.—Eutropius, lib. vii. sec. 19.

‡‡ Josephus de Bello Jud. lib. iii. cap. iv. sec. 1.—Lib. iii. cap. vii. sec. 31.—Cap. vii. sect. 36.—Lib. iii. cap. x. sec. 9.

§§ Ibid. lib. v. cap. ii. sec. 5.

*** Math. chap. xxiv. ver. 3. 15.—Mark, chap. xiii. ver. 3. 14.—Luke, chap. xxi. ver. 20.

Here also, to this very hour a *Christian church* is still supported, on the very spot, where there is every reason to believe *the Sacellum* of the Prætorium originally stood; and where the eagles of the

city.—They so well understood the Divine Prophecy, and so carefully hearkened to its admonition, that on the very first appearance of the Roman ensigns near its walls, under the threatening *Cestius*, they determined on endeavouring to escape;—and soon had the most marvellous opportunity of doing so, by the sudden and unexpected retreat of *Cestius* from *Jerusalem*, without any accountable reason in the world.—They retired to *Pella*, a small town on the other side of *Jordan*; whither the war did not reach;+++ and they were in safety: whilst the numerous Jews who had thronged to *Jerusalem* on account of the Feast of the Passover,* were soon finally shut up by the armies of *Titus*; and precluded from all possibility of deliverance.—And, whilst thousands, and ten thousands, perished by famine: and at last, so many Jews were crucified round the walls by the Romans, that there was scarce room for the crosses.+

As in the continuation of the account of *Portchester*, we shall have occasion to mention the *Sacellum* of a Roman Camp, as we did in the account of *Richborough*; it cannot be an improper digression to say here, that the *Roman Eagles* were surely very exactly characterized, by the Divine Spirit of Prophecy; both by *Daniel*,‡ and by OUR LORD, THE MESSIAH, under the appellation of *the Abomination of Desolation*; because, at the same time that their victorious progress was the cause of such dire desolation, they were themselves, in the language of Scripture, very truly *abominations*; being indeed *idols*; and objects of the grossest idolatrous worship, in these very *sacella*, in camps.—Concerning which fact we have the testimony of *Josephus*, who cannot be suspected of any intention, at the time he wrote his fair account, of elucidating the history of *the Gospel*.

He says,§ that when the seditious Jews were driven from the Temple into the Citadel of *Mount Sion*; and the Holy House was burned, and all the buildings round about it; the Romans brought their ensigns to the Temple; and set them over against its eastern gate; and there did offer sacrifices to them.

And *Tertullian* || informs us, that indeed the religion of the Romans, in their camps, at all times, consisted almost entirely in *worshipping the ensigns*; and in swearing by them.

Titus, the son of *Vespasian*, and the more immediate instrument of the threatened desolation; who shewed so much inclination to mercy, and so unwillingly destroyed the Temple;**—and who we find to have been so fully convinced++ that the uncommon

+++ *Josephus de Bello Jud. lib. ii. cap. xix. sec. 7.*

* *Ibid. lib. vi. cap. ix. sec. 3.*

† *Eusebius Hist. Eccl. lib. iii. cap. v.—Ephiphanius Hæres. 29. et seq.—Josephus de Bello Jud. lib. v. cap. xi. sec. 1.—Lib. v. cap. xiii. sec. 7.*

‡ *Daniel, chap. xi. ver. 31.—Matth. chap. xxiv. ver. 15.*

§ *Josephus de Bello Jud. lib. vi. cap. vi. sec. 1.*

|| *Tertullian in his Apologetic, cap. xvi. p. 162.*

** *Josephus de Bello Jud. lib. v. cap. ix. sec. 2. and 3. &c.—Lib. vi. cap. ii. sec. 1.—Lib. vi. cap. v. sec. 7.*

++ *Ibid. lib. vi. cap. ix. sec. 1.—Lib. v. cap. xii. sec. 4.—Lib. v. cap. xiii. sec. 6. and 7.*

legions that attended *Vespasian* were first planted.—And here also we find very much the same kind of outward inclosure, as at *Richborough*: with towers at irregular, and unequal distances.

The space inclosed, (as the great flatness of the country in this instance permitted it,) is nearly quite square. And the dimensions of the fortress are somewhat larger than in the instance of *Richborough*; but have a very near resemblance to those of that fortress.

In Mr. *Grose's* Antiquities, it is said that the area is 440 feet square

horrid sufferings of the Jews were beyond all example *manifestly from divine appointment*; appears to have fixed his own station first upon the Mount of Olives, in the very spot we have spoken of;—and afterwards, when the city was all taken except the Temple and Mount Sion; * on the very Tower of *Antonia*, † where Paul was first imprisoned;—and of which we shall have occasion to give a particular account hereafter.

It is also a curious fact, that seems justly to claim attention, before we finish this note; that not only *Vespasian*, the first instrument of DIVINE POWER in the dreadful catastrophe of the *Holy City*; but also his son *Titus*, the actual *destroyer* of it;—and even *Julius Severus*, the last instrument of the exercise of that heavy wrath *against Judea*, proceeded from this country.—*Severus* having been sent *from hence*, in the reign of *Adrian*, to punish the Jews who had revolted. ‡ And there is sufficient reason to think, not only that he made some abode here; but (from some circumstances in its structure) that a part of the wall of *Portchester*, was built in his time.

Titus must have been, with his father, upon this very spot at *Portchester*.—And it is related of him, that when *Vespasian* was, on one occasion, entirely surrounded by barbarian troops, and in extreme danger, *Titus* broke through the ring they formed, with incredible boldness, and rescued him; and putting the Britons to flight, slew many of them. §

Accidental circumstances, that connect together ideas of the different states and conditions of the same spots on earth, in different ages of the world, and of their different relation to all things around them, give occasion to some of the most interesting speculations that occupy the human mind.

And when we stand by the old walls of *Richborough*, or *Portchester*, which existed in the days of *St. Paul*,—and *Vespasian*,—and *Severus*;—or when we stand by the still strongly vegetating trunk of the *Saley Oak*; which there is the greatest reason to believe was growing before the Emperor *Constantine* was born; we seem to be ourselves living, as it were, for near two thousand years.—The interesting and the useful effect upon the imagination, may, therefore, ever warrant this sort of digression. There is a very curious description, and account, with two views of this venerable great oak, published by Major H. Rooke, in a small octavo pamphlet, printed at Nottingham, in 1797.

* Josephus de Bello Jud. lib. vi. cap. vi. sect. 2.

† Ibid. lib. v. cap. xi. sec. 6.—Lib. vi. cap. i. sec. 8.—Lib. vi. cap. ii. sec. 4. and 5.—Cap. iv. sec. 4.

‡ Xiphilin, lib. 69. p. 793. § Dion Cassius, lib. lx. p. 685.

within.—But according to my measures, taken on the outside of the walls, it is about 620 feet on the north, and south sides; and about 610 on the east and west,* exclusive of the projecting parts of the round corner towers.†

Having been constantly used as a fortress for so many succeeding ages; it has had vast, and extremely various additions made to it; both in the time of the *Saxons*;—and in those of the *Normans*;—and particularly in the reign of *Edward the Third*,—and in succeeding reigns, down to that of *Queen Elizabeth*.—But it will be proper, in the first instance, to confine our description to what was truly Roman, detached from the rest.

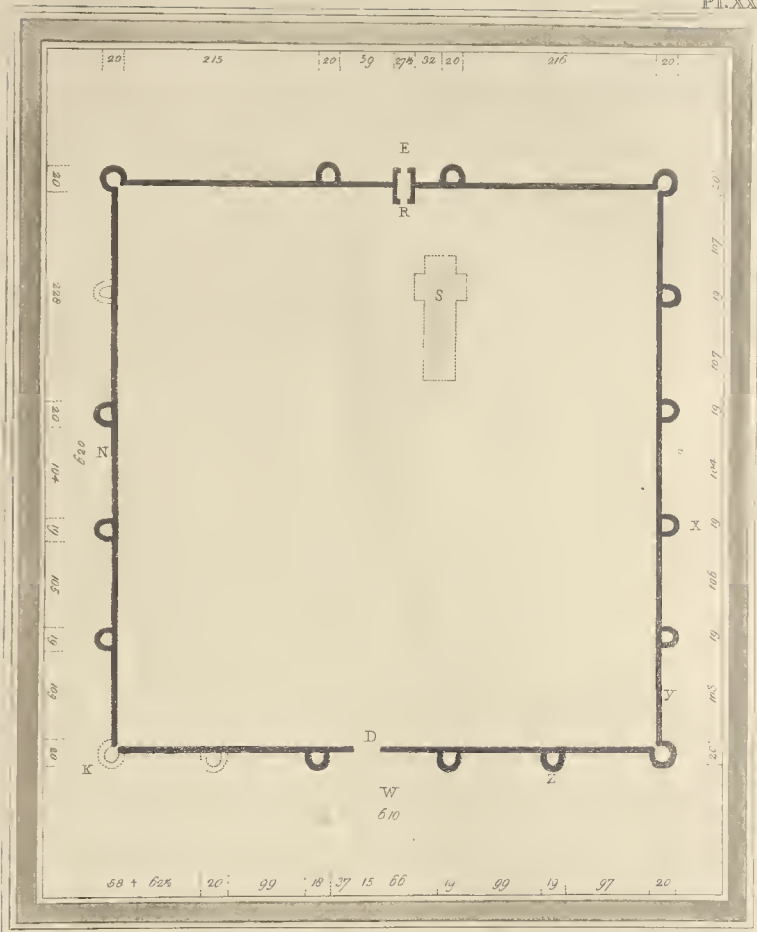
The original *Castrum*, with its walls still in great part remaining, even in the original form, is shewn Pl. XXI.—where we may observe there are still existing, round towers at three of the corners; placed much in the same manner as those were at *Richborough*.—And undoubtedly there was originally a fourth, at (K); where now stands, in its room, a great square Saxon keep.—The other towers are semicircular; some 19, and some 20 feet in diameter; and project in general about 18 feet and a half from the wall.

In these are still most visible regular rows of Roman brick; or *Opus reticulatum*, dividing the rows of stone work: and most particularly in the tower (x) are three rows;—and in that at (z); and in the wall itself at (y);—and indeed a curious observer may trace them throughout.—But as these walls have had vast, and repeated, repairs bestowed upon them, in different ages, and moreover certain alterations made in them (although the general form of the original *Castrum* has been preserved), the regular courses of the bricks has been in many parts interrupted.

At D, unquestionably was the great *Decuman gate*: and from the very irregular manner in which the great Norman gateway, whose remains still exist, has been inserted, it appears to have been much wider than the Norman gate, and to have been indeed nearly 23, or 24 feet in breadth;—that is, a little more than in the former instance, at *Richborough*.

* Many Roman coins and medals have at different times been dug up here. Some of which are described, in Vol. XLVII. of the *Gentleman's Magazine*, p. 313. and 382.

† The exact measures of each part are added in the plan, Pl. XXI.



Plan of the Roman Enclosure of Portchester Castle in Hampshire

Directly opposite to this, as usual; and next to the sea, as at Richborough, was the Prætorian gate (R); where again are now remains of a Norman tower of entrance.—But it is very remarkable, that in this very tower, at (R), on the side next the castle area, there is still a great circular arch of stone, about 8 feet wide, which has very much the appearance of having been originally *Roman*, and of having been even a remaining part of the identical *Prætorian* portal.

On the side of the Camp near this gate, just as at Richborough, was the *Sacellum of the Prætorium* at (s); where now stands the parish church, with every mark of the highest antiquity about it;—the ornaments being most truly Saxon. A religious establishment for *Austin canons* was founded here by Henry I.;—but a church was doubtless consecrated here, in the early Saxon times, on the very spot where had stood the *Roman Sacellum*; just as a chapel was consecrated at *Richborough*, by Austin, which caused the remains of the *Prætorian temple there*, to be afterwards denominated *St. Austin's Cross*.

There were undoubtedly two other gates, to this *Castrum*; one to the north, and one to the south, in the time of the Romans: but in Norman times they have been destroyed; and their places supplied by more secure sally ports, in other parts of the fortress.

It remains only as to the Roman vestiges of this fortress, to observe, that the walls here, are not so thick as those at Richborough; being more like those which were decidedly the walls of Severus in the northern parts of this Island; and not more than 8 feet thick; and indeed in some parts not more than 6 feet.

This *castrum*, like Richborough, in the later times of the Roman dominion, was one of those important places, maintained in a more particular manner than most others, for the defence of the coast against pirates; under the command of the great officer styled *Comes Littoris Saxonici*.*

And a plan of it, upon a small scale, is added fig. 13. Pl. the XXVIIIth; amongst the comparative representations of Roman castra; where *Burgh Castle*; *Richborough*; and *Dover*;—*castra* that

* Horsley Brit. Rom. p. 472.

were also amongst the important stations put under the command of the same great officer;* are in like manner inserted.

But as there are, in this fortress, even more than in others, such very strong vestiges still existing of all the various alterations that have been made in the different succeeding ages, it may not be amiss *now* to bring them into one fair state of comparison:—and this the rather;—because the doing so will afford a sort of small comprehensive sketch of the style of the different ages, that may even be useful to be referred to, when we come to explain the peculiar fortifications of each of those ages more particularly.

The first innovation, was plainly that of substituting a square Saxon keep tower, at the north-west corner of the *Castrum*, at (t) Pl. $\frac{XXI}{2}$; $\frac{XXI}{3}$; $\frac{XXI}{4}$, fig. 1. in lieu of the antient Roman round tower, which had stood there, as in other Roman *Castra*;—and as a place of residence for the chieftain, or prince; instead of the more antient *Roman Prætorium*; which had originally been, in the usual situation, near the *Prætorian gate*, and adjoining to that *sacellum* for the Roman idolatrous ensigns, at (s);—on whose foundations was afterwards reared a *Christian church*.

This keep tower, though at first sight it may deceive an inadvertent observer, and be supposed *Norman*, and somewhat like *Gundulph's* towers; yet, on a scrutinizing examination, appears to be truly *Saxon*, in every original part of its construction.

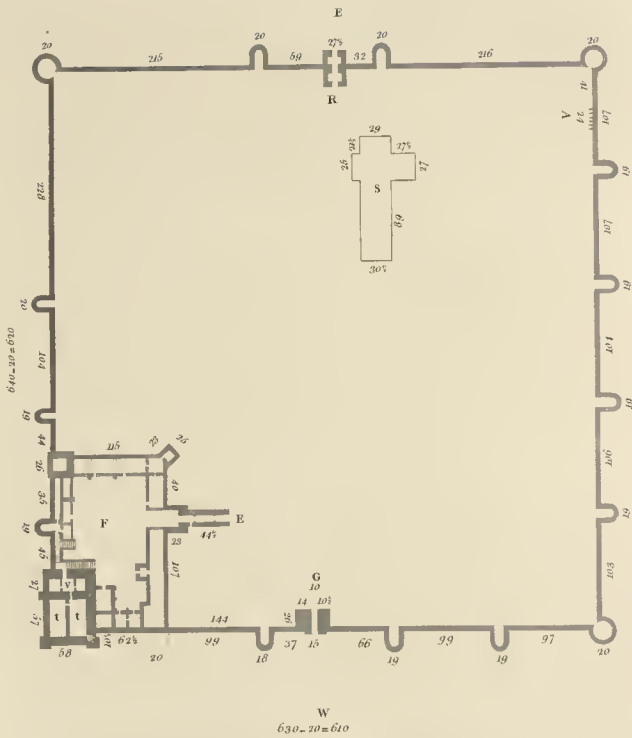
Much *less* than any of *Gundulph's* Norman keeps;—and far differing from them; though larger than many others of the early Saxon towers.

It is in its external dimensions;—57 feet on the north side, and on the south, by 58 on the east and on the west.

Its walls are near 8 feet thick;—and it may possibly have had its original entrance by a steep flight of steps at (q);—before the additional building, B q C, was reared.

It is very lofty, and contains two vaults, or dungeons, at bottom;—and apparently three double apartments, in so many several stories above them.

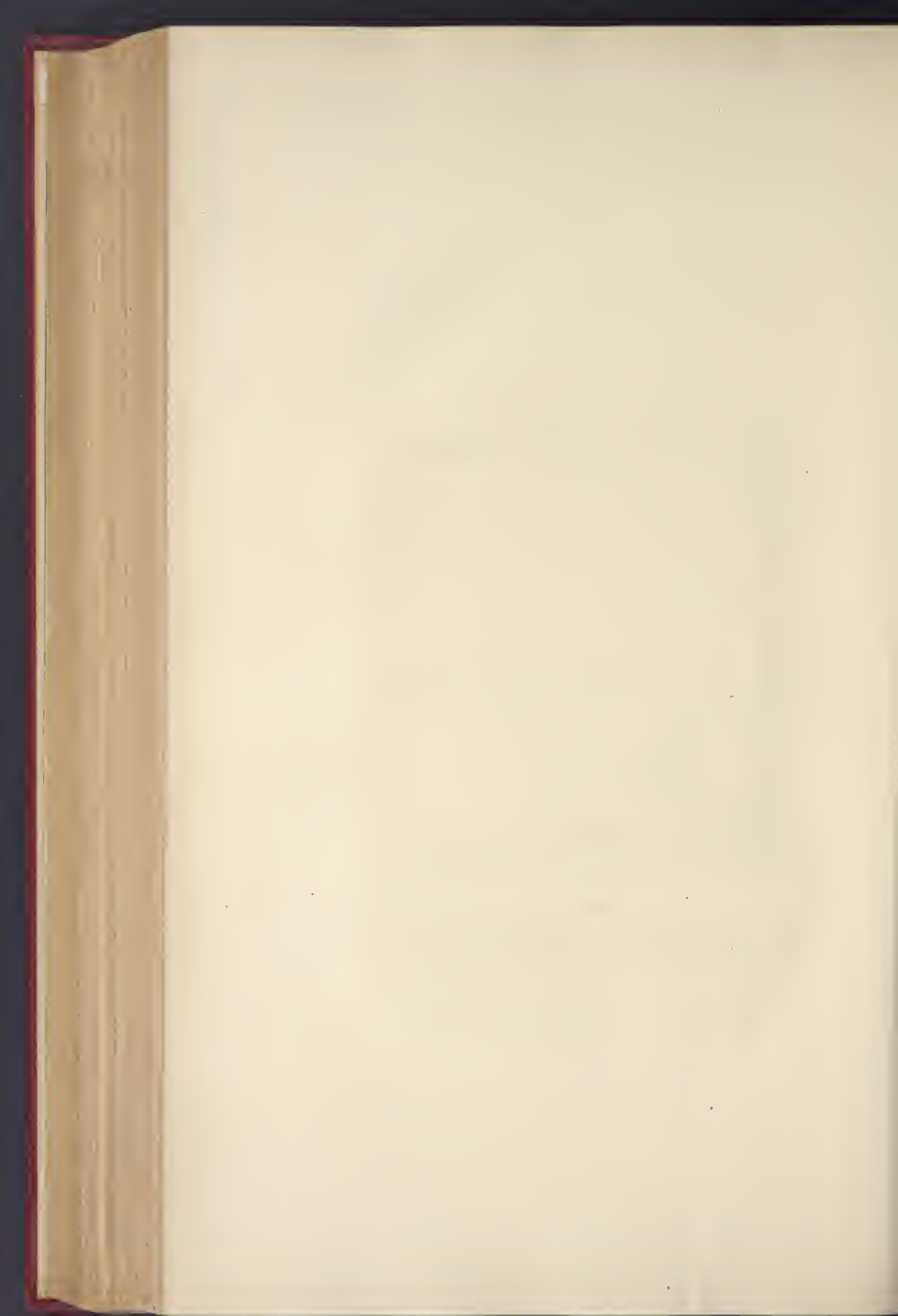
* Several Roman coins have, from time to time been dug up at Portchester; some of which are mentioned, and one whereof is represented, in the Gentleman's Magazine for 1777, Vol. XLVII. p. 313. and 382.



E.K. del.

Plan of Rochester Castle, with the Norman additions.

J. Storer sculp.



But it has merely narrow loops, and no large windows in any of them; no, not even in the upper state apartments; as Gundulph's, and the other Norman Keep towers, have.—Instead thereof it has, at best, only much smaller windows, of the very plainest, and truest Saxon style in the state apartments; and those only on two sides, in the third story;—and in no other, either above or below:—whereas Gundulph's towers have great windows, in that story, all round.—These small Saxon windows may be seen, Pl. $\frac{XXI}{5}$, where the whole building of the Keep, appears towering over the more recent Norman court.

It stands not, (like most British Keep towers;—or like Gundulph's Norman Keep towers,) in the clear open space of the castle area;—but (like most of the early *Saxon Keeps*,) adjoining to, and even upon the very outward wall of the castle area itself;—where, being at all times exposed to the attacks of an enemy, it was probably, on that very account, so contrived as to have not a single window on either of the two sides next the country.

From Gundulph's, and other Norman towers, it also differs;—in that the entrance (though indeed it is through an *additional building*;) yet is in an *additional building*, in a manner totally *different* from those in Norman Keeps.

There is some reason to suspect, (as has been already hinted,) that an original entrance might have been by a steep flight of steps from the ground, at (*g*), before the additional building was reared.

But whether that was so or no; yet still it is even now, by a portal, which has a fine circular Saxon arch at (*g*); where, to the best of my remembrance, does not appear to have been any *portcullis*; though indeed there is something like the appearance of a pointed arch on the inside:—a circumstance that we shall have occasion to observe does sometimes occur in other *Saxon*, and even in *British* buildings, as at *Chilham Castle*, in Kent, and in some other very antient buildings, long prior to the general use of the pointed arch.

This tower has also another most remarkable appearance in it, different from any seen in any of *Gundulph's*; or in any *Norman* towers;—for high up, on the inner sides of the end walls, east and

west, just a little over the third story, are most strange stone mouldings, pointing downwards, in the form of a (V), fixed against the walls; and, in a manner resembling a support for the ridges of a roof to be let in.

The form of them is shewn in the slight dotted elevation, Pl. $\frac{xxi}{4}$, fig. 2.—And whatever doubts I might entertain with regard to this extraordinary appearance, when I first visited the castle; as to the existence of some hollow flues;* it is impossible for me now not to be convinced, from similar appearances in some other truly Saxon towers; as at Oxford;—at Bridgenorth;—and at *Bamborough*;—and particularly in that at Castleton, in Derbyshire, (of a section whereof a slight sketch is given fig. 3. Pl. $\frac{xxi}{4}$); that they were actually formed for the purpose of better securing such a lower roof; constructed within the tower, and deep beneath its crowning parapet.

The plan of the tower, with all its proper dimensions laid down, and with the lower adjoining appendage of an adjacent building to form an entrance, is shewn fig. 1. Pl. $\frac{xxi}{4}$.

The approach is by a very steep flight of steps at D; and then through a portal at F; leading through a dark sort of vestibule to a second portal at (g); but, to the best of my observation, without any portcullis at all.

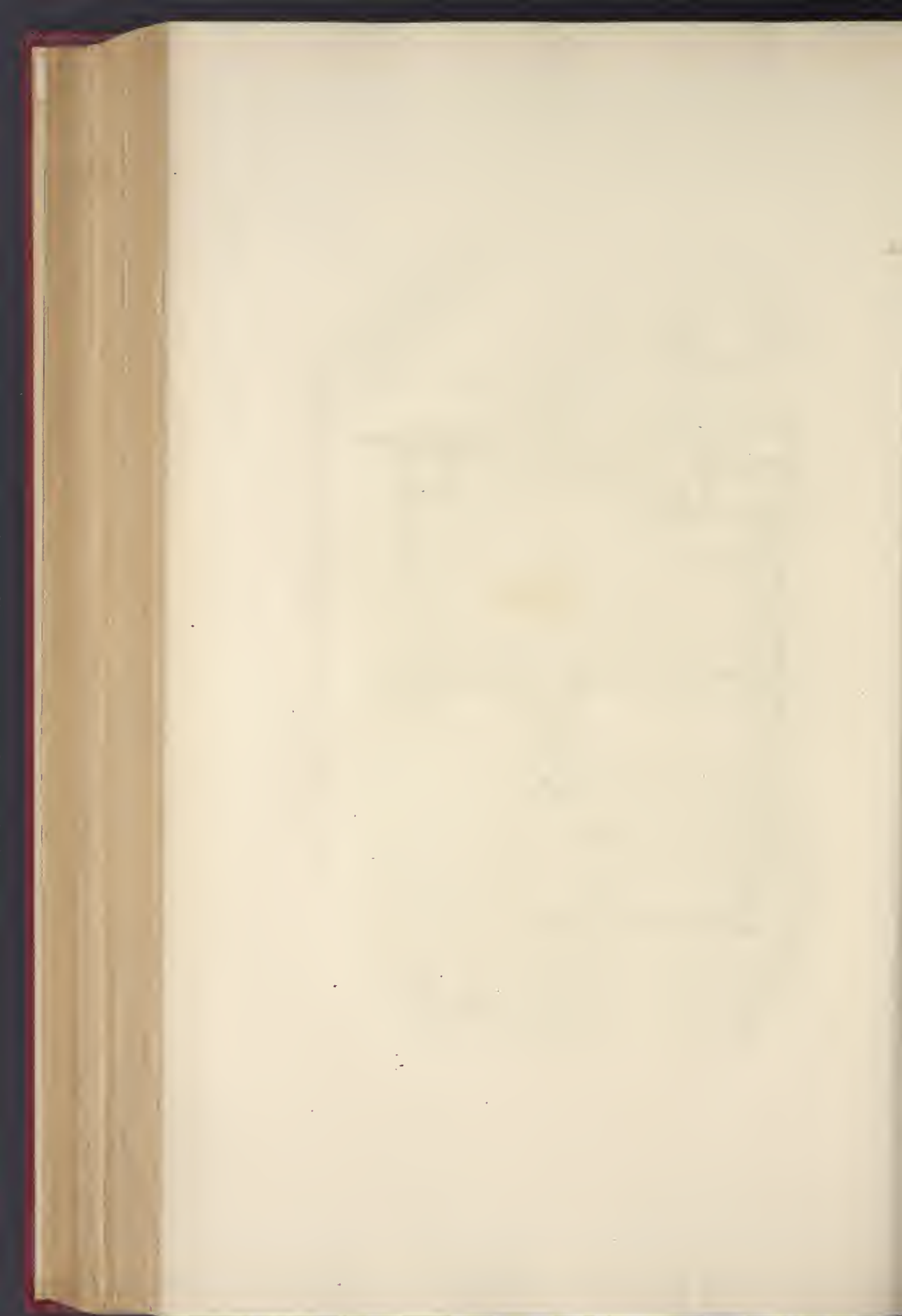
On the left hand, at (C), is an apartment that has served for a chapel; and was called St. Mary's chapel; but has evidently had the end wall (g), either rebuilt, or altered by forcing out the great window at (g), in subsequent ages; about the same period when the whole quadrangle of the inner court, (which had been first built in the time of Edward the First,) was altered and improved, with the addition of its large pointed arches, about the time of Edward the Third.—At (l), however, remains a truly old Saxon window, with its transom stone, as if to support the arch above, which window evidently shews the original high antiquity of this adjacent lower building;—and that here there was, originally, some really

* These appearances are mentioned in my first account, inserted in the *Archæologia*, Vol. IV. p. 406;—where I remarked that they are wrought with such manifest labour, instead of being mere rough projecting stones, as induced me to entertain a suspicion of their containing flues of some kind or other.



Plan of the Inner Court of Portchester Castle, with its Tower and Armin Works. J. Storer sculp

E.K. del.



Saxon structure.—This window may be seen, over the remains of the staircase, in Pl. $\frac{xxi}{6}$.

Another similar apartment is found at (B); and here another large window has been forced out, in still later ages, at (y):—possibly at the time when, as tradition says, this room was prepared, and fitted up as a bedchamber, for the reception of Queen Elizabeth, on her progress:—for we can hardly believe that such a window would have been allowed, *on the outside* of the castle, in the earlier ages.

On passing through the portal, at (g), we enter a guardchamber A: and here we find, in the corner, on the left hand, the pipe of a well in the wall; which is continued upward, to the apartments above; but not quite to the top of the castle; and is also continued down to the ground, where it is now indeed filled up with earth and rubbish; but where it appears manifestly, by the stone work, to have been continued down as a real well for drawing up water from a spring.

At the other corner, at (k), is a newel staircase, that leads from hence to the apartments above; and to the top of the tower.—At (m) is the entrance to the great chamber (t 2), and the rooms above were similar in their disposition.—But there are no galleries in the walls; as in Gundulph's Norman towers.

Here, therefore, we have evidently, by every characteristick mark, the perfect remains of a *Regal Saxon tower of residence*.—And the only fair account that can be rendered of its origin is, that about the year 501, Porta, the Saxon, with his two sons, *Bieda* and *Megla*, landed at the place now called *Portchester*; and brought such aid to *Cerdic*, that by means thereof, in 519, he founded the kingdom of the west Saxons.—At *Portchester*, therefore, he must have found, and must have possessed himself of the prior *Roman castrum*, which we have already described; and the walls of which do still, in so many parts, remain.—And as this tower is neither *British*; nor *Roman*; nor, when closely examined, furnished with the advantages of truly *Norman towers*, either on *Gundulph's* plan, or of any later design; we must conclude it could only have been *Saxon*; and have been reared either by *Porta*, or *Cerdic*, or by some of their *Saxon successors*.

Besides the rearing of this great Keep, whatever else the Saxons did, they clearly reared a *Christian church*, on the spot where had stood the antient idolatrous *Sacellum*.—And the present remains of the Church, as well as of the Keep tower, seem to indicate that both were built in the later, and more civilized ages, of the Saxons.

A sketch of the western front of the Church, with its truly Saxon door,—and with the arch of its window above, now bricked up, is shewn Pl. $\frac{xxi}{6}$.*

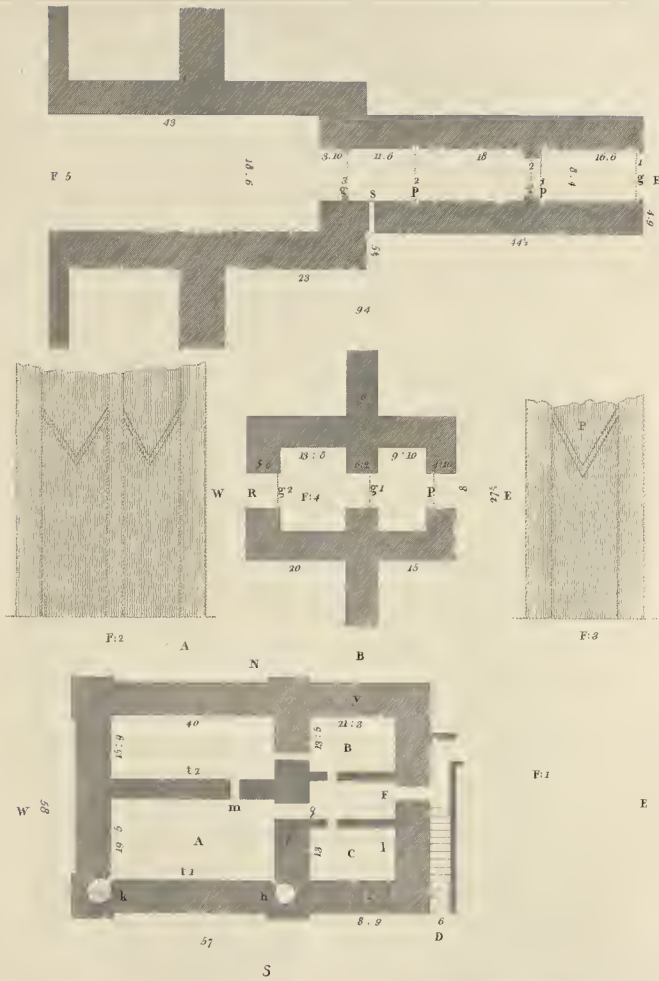
We come now to the consideration of the Norman works.—And here we find, first, at R,—Pl. $\frac{xxi}{3}$, the great *Water gate*; where stood the Roman *Prætorian gate*;—At present, though much in ruins, a great Norman tower; full as different from the original *Prætorian gate*, as the other western Norman tower of entrance, at (G), was from the original Roman *Decuman gate*, within the space of which it was inserted.

The plan of this water gate is shewn, Pl. $\frac{xxi}{4}$, fig. 4; with all its exact dimensions.—On the side next the sea, or harbour, it has every appearance of a truly Norman gate; and was secured, at that entrance, by a portcullis at (p), as was ever usual in such Norman structures.—It had also great gates, or folding doors, well barricaded, at (g 1), and at (g 2).—But the inner wall, and the great stone arch at R, appear to have been of higher antiquity; and may even be suspected, from some circumstances, to have been Roman;—though if that were the case, the whole must have had some alterations made when the rest of the gate tower was built.

Passing, according to what is shewn in Pl. $\frac{xxi}{2}$, from this water gate, at R, by the Saxon church, at S, through the great area of the castrum; which in Norman times was called the *utler baillie*, or *outer ballium*; we come to that which was the great Norman work of all, the *inner ballium*; a great inner court, at F, built according to Norman usage, as a further protection to the Keep.

This great work, which there is the utmost reason to believe was first reared here, about the time of Edward the First, consists of a great oblong square court; more minutely shewn in Pl. $\frac{xxi}{3}$; in

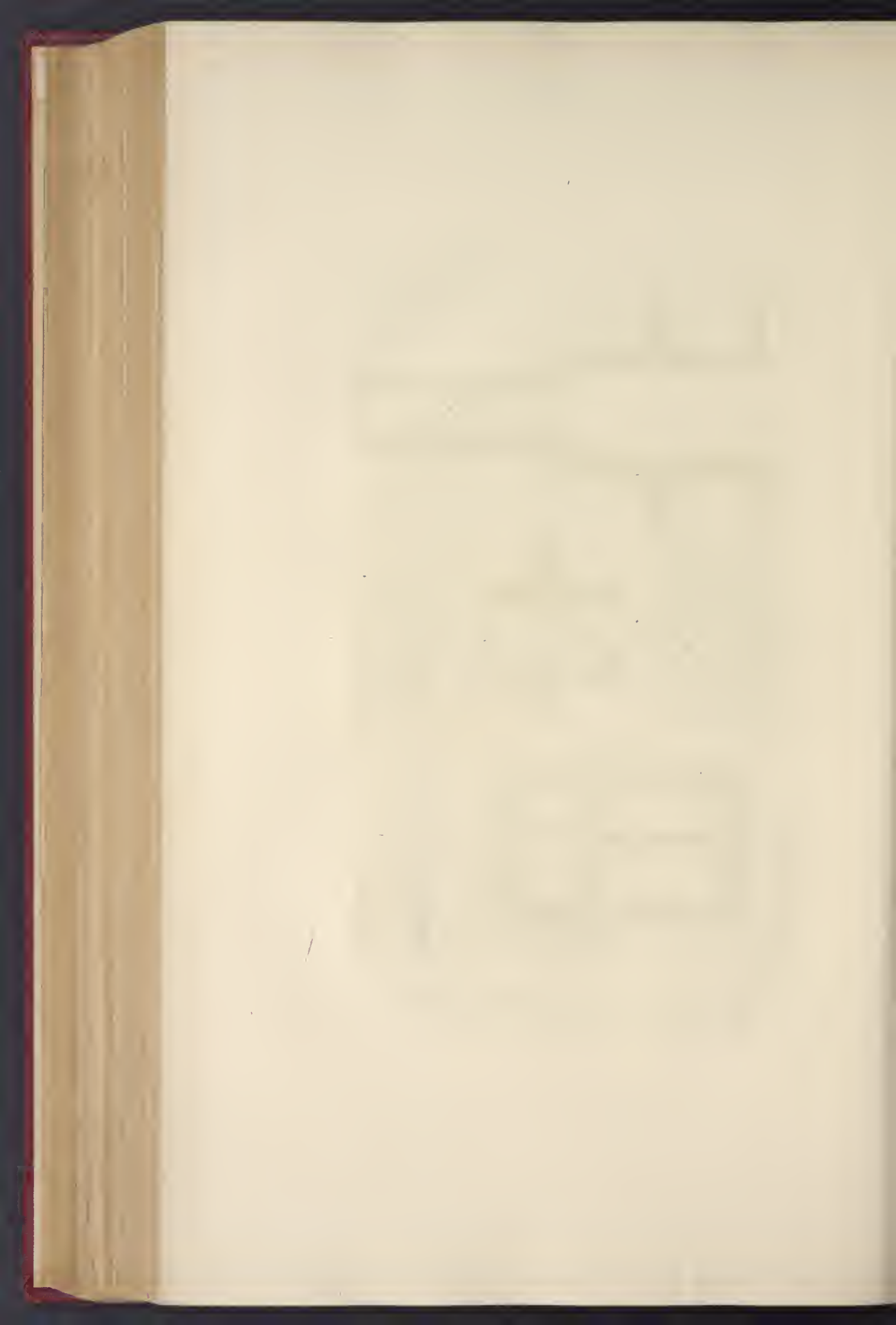
* Another view of this church, with the Saxon windows in the tower, corresponding with those in the keep tower, may be seen in Mr. Grose's Supplement, Vol. V.



R.K. del.

J. Storer sculp.

Plans of Saxon and of Norman parts of the castle at Winchester.
 Also Elevations of the inside of the end Walls of Winchester Keep, and of that at Castleton.



which was manifestly a great Dining Hall, at H; with its porch of entrance, at (e).—And the apartments (n 1—n 1—n 1—n 1—n 1.) were, there is every reason to believe, the Buttery, and Butler's offices;—and perhaps part of them the Kitchens; whilst (n 2—n 2—n 2, &c.) were other proper offices, and stables; with apartments over them, for lodging of the garrison, and servants;—as there were also apartments in the square Norman Towers, P and O, for such purposes; and in the old Roman Tower at N.

The great Saxon Keep was unquestionably the residence of the Chieftain, or Commander, in Norman times; as it had been *the Palace* in Saxon times;—and it was offered, as such, even for the accommodation of Queen Elizabeth.

At, D, was the grand Staircase leading to this Palace Keep; from whence, at (m), was a passage to a covered way upon the wall, leading, by further steps, first to an apartment in the old Roman Tower, still left standing (at N); and from thence, to the square Norman Tower (at O). And at (L), is another Staircase for the common passage up and down of the garrison soldiers. At (P) is another Norman square Tower, with rooms one above another, for lodgings.

The divisions of the apartments here shewn, are nearly such as they were, when I was there, in 1774:—but they have been so frequently altered, of very late years, for the accommodation of French prisoners; that I will not pretend to decide accurately that these were just the original divisions. This only may be said;—that though this inner court appears to have been first constructed about the time of Edward the First; yet its inner walls, and arches, seem as evidently to have been improved, repaired, and added to very much, in the time of Edward the Third; and in some parts in the time of Henry the Sixth, and Henry the Seventh; and even so late down as the time of Elizabeth. But its more characteristick style is that of the reign of Edward the Third.

A view of the west end of this inner court, is given in Pl. $\frac{xxi}{s}$ — where the great hall door appears on the left hand; and the entrance of the antient great staircase, leading up to the Keep Tower, appears on the right;—with the old Saxon window of the Chapel over it;—whilst the new wall, with its great new hanging window, and a door way underneath, of the latter ages, are also shewn, as they

appear in the court;—as are also the end of the Buttery; and the Kitchen buildings, as they were about the time of Edward the Third; and as they have still remained.

In this court, or *Inner Ballium*; besides the Well in the Keep itself, was a Draw Well, at W, for the common service of the garrison, which still remains open.†

But the fortified entrance to this inner Norman Court of the Castle, is its most curious part. This, which is seen, on the south side of the court, in the plans, at E, seems to have been in part constructed so late as the reign of Henry the Sixth. And we shall hereafter have occasion to compare it with another remarkable one of that period.

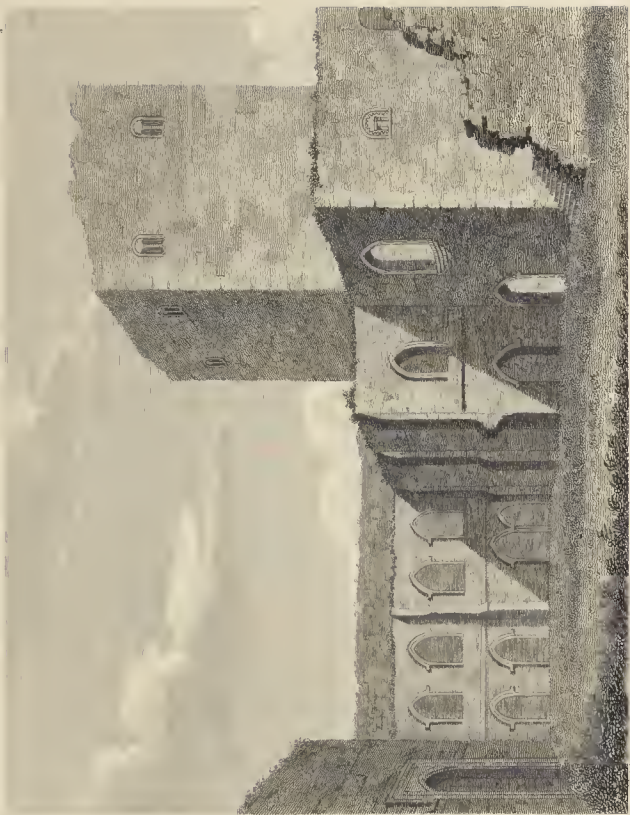
A plan of it, on a larger scale, is given, Pl. $\frac{xxi}{4}$, fig. 5.

At E was a noble Portal, having a fine pointed arch;‡—and in this was a great strong Gate ($\frac{t}{g}$) about 8 feet wide.—Further on, about $16\frac{1}{2}$ feet from this, at ($\frac{t}{p}$) was a Portcullis;—and, beyond it, a second great Gate ($\frac{t}{g}$).—Eighteen feet more inward still, was a second

* In the Antiquarian Repertory, vol. iv. p. 75, is a view of the other part of the court, at the contrary end; in which are seen, on one side, the large windows of the hall.

† As a useful caution to those, whose eager curiosity in the interesting survey of the vestiges of past ages may lead into a similar state of danger, it may not be improper just to mention a narrow escape which I had, from sudden destruction, on this spot;—an escape which I must ever deem providential;—and for which I can never be sufficiently thankful. This Well, when I visited the Castle, in 1774, was left quite open, and uncovered; and the top of its pipe smooth and level with the grass, without even a projecting row of brick, or of any wood work to stop the toe of a shoe. I had taken with me an old, half drunken, sailor for a guide; who had, at that time, the advantage of attending strangers at this place.—I was, with my paper and pencils in my hand, making sketches;—writing down observations; and continually advancing to obtain different points of view;—I had actually set one foot on the brink of the well, and had lifted up the other to advance; when one of those unaccountable changes of thought occurred to my mind, which made me take off my eyes and attention from the object I was surveying; and in doing so, for quite another purpose, I instantly saw my danger; and started back.—Then;—and then only, my old weather-beaten guide, taking leisure to discharge his quid out of his mouth,—cried out,—*a-loy, Sur;—the Well*;—and my servant came running to know what the matter was. The remembrance of this, has saved me from other dangers since;—as also the remembrance of stones flung down, both by the winds, and by *birds of ill omen*, from the lofty heights of *ivy mantled towers*.

‡ A very good view of the interior part of this great Portal, is given in Grose's Supplement, Vol. V.



View of the Norman inner fort at Barbizac



Portcullis ($\frac{2}{p}$);—and about $11\frac{1}{2}$ feet beyond this was a third great Gate ($\frac{2}{g}$).—Thus far the whole passage of entrance was only 8 feet 4 inches in width; and at (s) was a side gate, or sort of sally port.

Nearer the court, the side walls are built still stronger; being near 6 feet thick: and here the passage of entrance, (which is still continued for 43 feet more,) grows wider; being $18\frac{1}{2}$ feet in breadth. And in this part was designed a place for barricadoes;—whilst the whole passage, of near 94 feet in length, was vaulted over the whole way; and had perforations, and machicolations, at the top, for pouring down hot sand, melted lead, and boiling water, on such as should attempt to force an entrance. And to these machicolations, and the battlements above, was a passage from the top of the surrounding walls of the inner court.

At (G) Pl. $\frac{xxi}{4}$, has been erected a Norman Tower-gate of entrance, about 34 feet and a half in width, and more than 30 feet in depth, with a gate way about 10 feet wide, on the spot where was the great original Roman *Decuman gate*;—but none of these alterations, great as they are, and in ruins as they all now are, have materially altered the original appearance of the antient *Roman Castrum*. In such legible characters are the records of those who lived in antient ages, marked by their works;—when not blotted out by the wanton hands of worse than savage barbarians, who take delight, with thoughtless stupidity in obliterating, by way of improvement, the memory of those who deserved better than themselves to be remembered.

Roman fortresses, of a very similar construction in form, and in the disposition of the materials, to those at *Richborough*, and at *Portchester*, are met with in very remote parts of the world.

In Egypt,—at Nicopolis, about four miles from Alexandria, where Augustus gained his victory over Marcus Antonius, is one that may very well be compared with this at Portchester.*

It is in the form of a square, of great dimensions; having six semicircular towers on every side, like those at Portchester; but a square one at every corner. It has four regular entrances: one near the midst of each side. And its walls are at least 20 feet high;

* See the plan and description of it in Pococke's Travels, Vol. I. Pl. V. fig. E. p. 11.

built of small hewn stone, (as at Richborough and Colchester,) with three rows (or *Θεμελίωσις*) of brick, at the distance of every 4 feet and an half.

In the same remote, most antient country of Egypt, are also remains of another Roman Castrum, which well deserves attention, on the present occasion; though not exactly of the same form with the preceding. It is called *Casr-Kieman*, or *Castle-Kieman*, and is near Grand Cairo. Both this, and the Castrum of Nicopolis, are represented on a small scale in Pl. XXVIII: where fig. 14, represents Nicopolis; and fig. 15, Castle-Kieman.

The walls are, in the same manner as those of the former, built of small hewn stone, having three layers of bricks, at the distance of every four feet; and it has round towers, like those at Portchester, at the four corners; and semicircular towers in like manner, on every side;* and four entrances. But, instead of being square, it is in the form of a very long parallelogram. And as we find *Saxon*, and *Norman* additions at Portchester; so here we find *Syrian*, and *Saracenic* additions, of later ages than the time of the Romans. For at (*tt*) are two great round towers, of a construction very unlike those of the Romans;—one of which, though now used as a place of habitation, and even made a sort of nunnery, has still an open well, in the centre, going down quite from the third floor.† And there seems also to have been the insertion of a more modern *Saracenic* gate of entrance, in the space where was the Roman Decuman gate.

Let us then, in the next instance, on this very account, the rather turn our attention again homeward; to a most interesting remain of Roman architecture, in our own country; where we shall find the apparent remains of a *Roman Decuman gate*, still more entire, and disincumbered; with the two Roman towers between which it^s was placed, still standing; and with dimensions that agree with every classical description.

* See the plan in Pococke's Travels, Vol. I. Pl. IX. fig. A. p. 26. and an elevation, fig. B. shewing one of its gates; with the more modern insertions and alterations.

† In this Plate IX. of Pococke's also, at C, is a plan of the Tower, with the open Well; which well deserve to be considered, by the curious, both on this and on some other future occasions that will be mentioned in these sheets.



A. C. del.

J. Smith sculp.

West front of the Saxon Church in Portchester Castle.



This is the well known, but as it has been thought by some persons, the questionable Castle, at *Pevensey, in Sussex*. The real æra of which has been brought into doubt, only because of subsequent, and additional alterations made *there*, as at Portchester.

This old Roman *Castrum*, being situated on a very remarkable, but useful elevation of ground, whose surface was rather of an irregular figure, is therefore made conformable to it;—and is of an irregular form: as we find, indeed, was sometimes the case, with regard to other distinguished fortified places of the Romans.

Silchester in our own country; and *Byzantium*,* which was made the great seat of the Eastern Empire; are both instances of this kind. In both we find a form, far differing from a regular square form.

* The Chronicle of Alexandria,† and the Greek writers, inform us, that *Severus* himself rebuilt, in great part, the city of *Byzantium*, which had first been reduced to be a Roman province by *Vespasian*. And it is to this hour evident, that *Severus* complied, in its form, with the peculiar figure and situation of the original spot of land on which it was situated. And that both *Constantine*, and *Theodosius*, did the same afterwards, when they added to its walls. It is evident, however, that it had towers of a more original construction than theirs,—even with a manifestation of art, and contrivance, beyond the usual art of the Romans, before the time of *Severus*.

Dion Cassius informs us, in a passage; that appears to have been hitherto not quite rightly translated, that seven of the towers, before *Severus* besieged and destroyed the city, beginning from the *Thracian* gate, were so constructed, as to convey any sound from the first, in succession, to all the rest; even to the last. In which instance we have the very earliest mention known, of pipes in buildings for the conveyance of sound. But whether it was of *Persian*, or of *Greek* invention does not appear.

The words of Dion Cassius are, ‡

Ἐπτά μὲν γὰρ ἀπὸ τῶν Θρακίαν πυλῶν πύργοι καθήκοντες πρὸς τὴν θάλασσαν ἦσαν. Τούτων δὲ εἰ μὲν τις ἄλλω τῷ προσέμειξεν, ἤσυχος ἦν· εἰ δὲ δὴ τῷ πρώτῳ ἐμβόησέ τινα, ἢ καὶ λίθον ἐνεβλήμεν, αὐτος τε ἤχηε καὶ ἐλάλει, καὶ τῷ δευτέρῳ τὸ αὐτὸ τοῦτο ποιεῖν παρεδίδου· καὶ οὕτω διὰ πάντων ὁμοίως ἐχώρηε, οὐδὲ ἐπιβάραιον ἀλλήλους; ἀλλ' ἐν τῷ μέρει πάσι, παρὰ τοῦ πρῶτο ἄλλοῦ ἕτερος, τὴν τε ἤχην καὶ τὴν φωνὴν διεδεχούσῳ τε καὶ παρεπέμπετο.

Which we may thus most fairly translate :

There were seven Towers from the Thracian gates belonging to the part next the sea. And of these, if any one addressed his voice to, (or struck against) any one of the rest, all was silent, (no sound was transmitted). But if he cried out towards the FIRST, or slung a stone against it; both it rendered a sound, and rendered the words, and delivered, (or transmitted) to the second to do the same. And so the sound (or voice) went through all of them in like manner. Neither did they disturb

† Chron. Alexand. p. 626.

‡ Suid. p. 724.

§ Lib. lxxiv. p. 847.

Here, at Pevensey, as at Portchester, were indeed many subsequent alterations, and additions made in *Saxon*, and in *Norman* times. And particularly, in the latter, was added a strong inner court, as usual, with several towers, and buildings; some of which remained entire, even within my remembrance; though they are now destroyed.

But though these more modern structures are so far perished; yet here still remain, defying the devastation of ages, a very great part of the old Roman walls of the *Castrum*; and of the great *Decuman* gate.

This Gate is represented, Pl. XXII.* It is 29 feet in width; whilst the solid towers, on each side, are only 16 feet in diameter. Here was, therefore, even a more magnificent grand entrance to the

(or hinder) *one another*. *But all of them, in their turns, each from that before it, received, and transmitted, both sound, and voice, to that beyond it.*

There cannot be clearer words to describe those pipes for conveyance of sound, which we shall find, in some other instances, were either imitated, or anew invented, in succeeding ages.†

Besides this curious invention, we are told by *Dion*,‡ the walls were built, on the outside, with great squared stones, bound together with brazen plates (or grapplings); and on the inside strengthened by mounds, and building; with a walk (or covered way) on the top:—whilst the Towers, placed not at regular equal distances, but at the precise turnings of the wall, had loops so directed, as to intercept, if needful, any one passing along on the circuit round.

The walls also were furnished, in every part, with great machines:—some of which threw huge stones, and beams of timber;—some flung showers of small stones, darts, and spears. Some flung hooks, and harpoons, with which they caught hold of the enemies' ships, and machines of war, and drew them to the city. And having (by means of divers in the sea) cut the ropes of the anchors, and fixed other ropes to the ships, the *Byzantines* dragged even the *triremes* of the enemy from their stations, to the shore.

When their ammunition of stones and darts failed, we are told the *Byzantines*, with their machines, flung even the statues of their gods and heroes at their enemies; and were reduced at last only by famine;—and that *Severus*, astonished at the vast effect of those engines, spared the Engineer *Periscus*; though he destroyed all the walls, and towers, and put all the magistrates and soldiers to the sword.

* I am indebted for the Drawing from whence this Engraving is taken, to the late Sir William Burrell; who permitted me to copy that taken for him by Mr. Grim. And having examined the spot myself, when I took my plan, I can bear testimony to its being now, (with a very slight alteration, which I ventured to make in it) exceeding faithful and exact.

† Some such pipes have been mentioned in my former dissertations; *Archaeologia*, Vol. IV. p. 386.

‡ *Lib. lxxiv, p. 345.*



James C. Ashmole, sculp.

Fromm, del.

Great Decuman Gate of the original Antonine Castrum, at Perinsey in Syria

old Castrum, than at Richborough; yet with a manifest attention to the proportion necessary for the marching out of *ten men abreast*.

In Norman times, (just like the gate at *Castle-Kieman*, in Saracen times) it seems to have been built up with a wall across it, leaving only an arched gate way; as is shewn in Buck's view; but that Norman wall being now almost entirely destroyed, we are enabled to ascertain both the real novel insertion of that wall; and the original state of the old *Decuman gate*.

In this Castrum, (it being unquestionably of later date than either that at *Richborough*, or even that at *Portchester*) the towers surrounding the whole area, do not seem (as at Richborough) to have been built, at any subsequent period, after the erecting of the walls;—but seem plainly to have been, in general, of the very same age as the walls themselves.

But that they were actually Roman buildings, is obvious; from the exceeding regular courses of the Roman bricks (or *Θεμελιαί*), at such certain very regular intervals one above another:—distinctly shewn in the view of the Towers as they now are, Pl. XXII.

It may indeed be allowed to be true, consistently with a remark made by Sir Henry Englefield;* that the appearances of Roman bricks; or even of *some* one, or two *regular courses* of Roman bricks, are no certain proofs of a building having been originally Roman.

For this fact is evident, from what appears at *Chepstow Castle*, and at *Colchester Castle*; and from the instances also of *St. Alban's Abbey*; and of the *Old Church at Canterbury*; and of many other buildings.

Yet it is as undoubtedly true, that no instance can be produced, of such very regular, continued, *Θεμελιαί*, or alternate courses of brick, and stone, as those which are discernible at *Pevensey*; except in truly Roman buildings.

These regular alternate courses, appear not only in the towers of the great *Decuman gate*, but are very visible elsewhere.

As they appear, in the *Decuman gate*, they are justly represented in the *Drawing*. But from its being taken, on one side of the gate,

* See *Archaeologia*, Vol. VI. p. 104, 105.

in order to shew the continuance of the turn of the walls to the Tower (e), and to bring that into view; the space between the Towers appears rather less than it should do, in order to represent fully the real magnificence of this great entrance.

And I must now add, also, that this Tower at (e), which was standing when the drawing, Pl. XXII. was made by Mr. Grim, and when the bird's-eye view, Pl. $\frac{XXIII}{4}$, was taken; was fallen down, and removed, when I visited the spot in 1787, and took my plan.

Pl. XXIII. is a plan of the whole Fortress; with the exact measures of every part annexed, as accurately as I was able to take them.

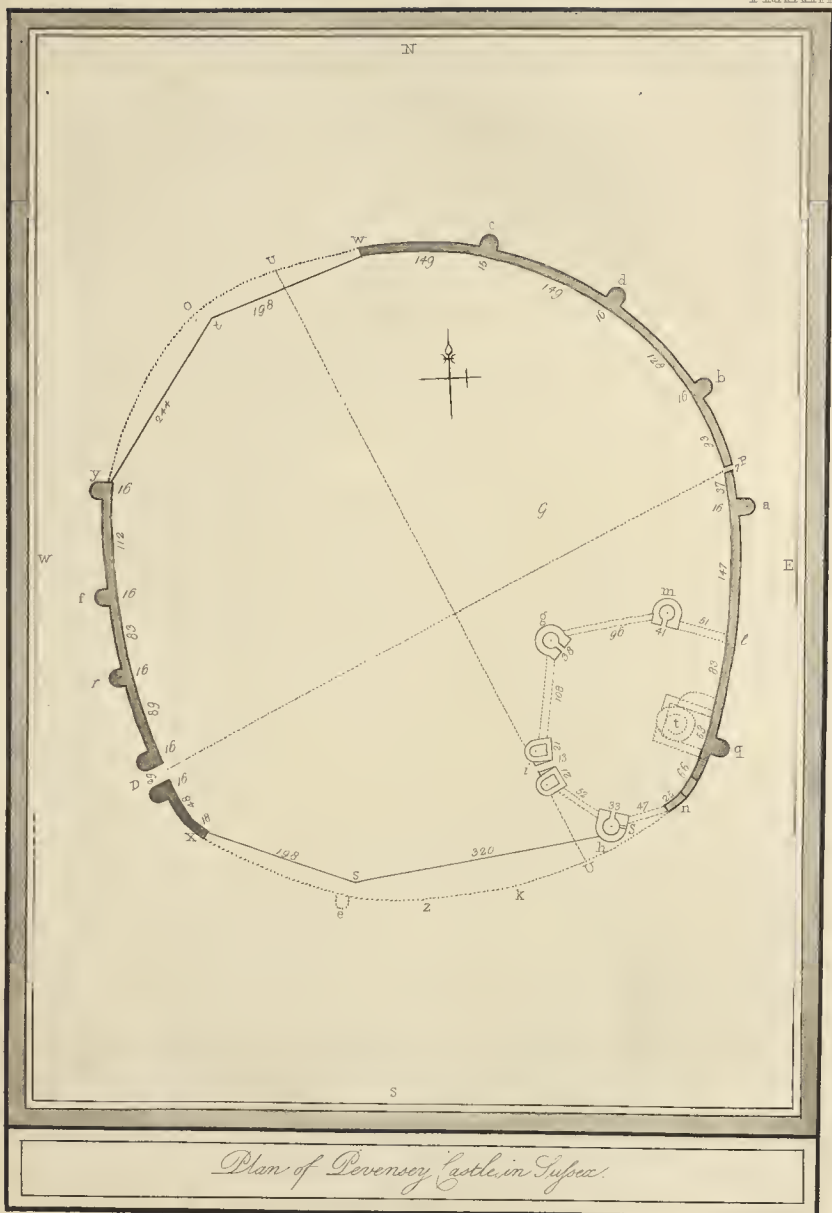
It appears indeed at first sight, (as has been already observed) to be of a more irregular form than most Roman fortresses: (which has induced some Antiquaries to doubt of its *Roman* origin).—But whoever examines the ground, and the adjacent country, will perceive, at one glance, the reason for this deviation from the more usual plan.

It was evidently made to correspond to the surface of the whole remarkable eminence, in the midst of the country, on which the whole stands.

And, after all, considering fairly, the usual plan of so many Roman camps; and that they were indeed most commonly not exact parallelograms, (or long squares) with *sharp* corners; but so formed as to have *the corners almost always rounded off*;^{*} it really bears a nearer, and a much greater affinity to them, than, from the irregularity of the ground, could well be expected.

The situation also of the *Decuman gate*; and of the *Prætorian gate*; which are here not in the *middle* of the opposite sides (though in-

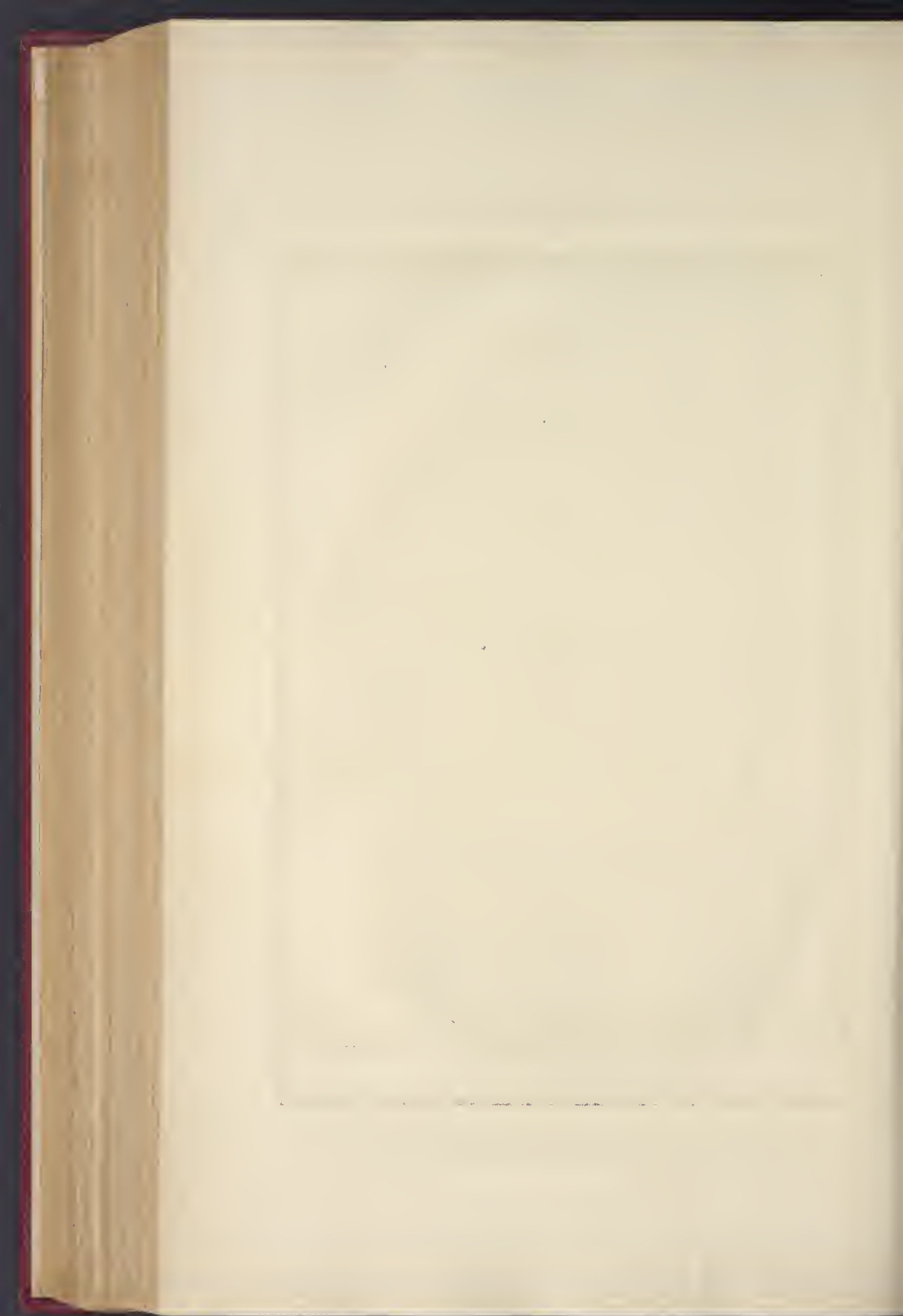
* If any credit is to be given to the plan published by Moll, in 1709, in his Map of the United Provinces, from observations made by Ortelius, and others, when the foundations had been examined at three different times, in 1552; 1562; and 1588; there was a fortress built, at the mouth of the Rhine, by *Caligula*; called *Aux Britannica*, or *t'Hyis te Britten*; which was about 80 paces, or 240 feet square; and had the corners so much rounded off, as to give the plan of it a thoroughly curved appearance, something like *Pevensy*. And it had also the *Decuman gate* situated nearly as at *Pevensy*; and the *Prætorium* placed nearly as at *Richborough*.



Plan of Rowesey Castle, in Suffolk.

J. K. del.

W. Richardson sculp.



deed directly opposite to each other;) may in like manner be very well accounted for, by a considerate observer, who surveys the adjacent country.

Let us then examine the appearance of some other parts of the walls, besides the Decuman gate; which will shew us how truly Roman this fortress appears to be; notwithstanding the subsequent Saxon, and Norman additions:—and how right *Sommer* probably was, in his conjectures, that this was the ancient *Andarida*.

Plate XXIII. contains the plan which I took in 1787, with all the precise measures of every part:—and Pl. $\frac{XXIII}{2}$, is the Engraving of a slight sketch, or sort of bird's-eye view, formed several years before, when Mr. Grim made his drawings; and formed only slightly, merely to explain the relative situation of the parts represented by him in each of those designs.

In that sketch are some few parts of walls and towers shewn, and particularly a Tower at (c), which were pulled down before I had the opportunity of visiting the spot. And there appears also some little deviation of figure between my plan, Pl. XXIII. and this bird's-eye view of Mr. Grim's. But, as on the one hand, I was as careful as possible in making the former; though it was not indeed an actual mathematical survey: and as, on the other, Mr. Grim's view was drawn merely from the best of his idea, on looking around him from the spot where he had taken his station; so I have suffered them both to go without any alteration; because they will be sufficiently intelligible when compared together; and because it would now be unjust to Mr. Grim, to make any:—and the fullest care has been taken, that the letters in both may correspond.

The great *Decuman gate* appears at (D); on the west side; in a situation, considering the whole face of the adjacent country, the properest for the marching out of an army in battle array.

And directly opposite, at (P), on the brow of a sort of cliff; and on the side that was formerly nearest to the washing of the sea, (just as at *Portchester*, and at *Richborough*) was the *Prætorian gate*;—which is not left so near its pristine state as the *Decuman*, but has undergone several repairs, and alterations;—yet nevertheless retains enough of its original form, to shew very nearly what it was.

The representation of it is given, Pl. XXIV. as it now appears on the inside.

And the view of it, with the adjacent walls, on the outside, is given, Pl. XXV.; where we may plainly perceive, that the whole has received much reparation. And, though the regular courses of brick remain, yet in many parts they are covered by new work.—In the Tower (*b*), appears particularly the repair of a great breach; which, from the peculiarity of the *herring-bone* work, seems manifestly to have been made in Saxon times.

These towers do not contain apartments; but are quite solid, as far as now remains above ground.

When I took the plan, here given, in the year 1787, there were eight of them still remaining (*abcdyfrq*); besides the two on each side the great Decuman gate (*D*):—all of which were of the same form, and of the same dimensions; being very nearly 16 feet in diameter, (excepting that at (*c*), which is only 15); and all of them projecting, with straight sides, somewhat more from the wall. But there had been, in the memory of persons living, several more such towers in the circuit; besides that seen in the bird's-eye view at (*e*); for the country people in the neighbourhood, having discovered of late years, that by undermining the cliff (already so much worn away by time, and the washing of rain), only a little further, they might be made to fall down; and that part of the stones and materials might, by that means, be obtained for their private use; they have actually thrown down several, within this century, with parts of the adjoining walls; some of whose ruins lie scattered in the valley, just beneath the part marked (*xzk*).—Above these ruins, modern straight walls are now built, further inward, in the area; marked (*xs*) and (*sh*), in the plan; and very different even from those which stood there in *Mr. Grim's* time, and which are seen in his sketch;* whilst, as to the old Roman wall; it seems clearly to have been carried on, originally, in the direction of the dotted line (*xzn*).

Some others of the towers have begun to be undermined; but, to preserve this fine Remain of Antiquity, have been lately supported with new work, as is seen particularly in that at (*d*), Pl. XXVI.

* Pl. $\frac{xxiii}{1}$.

Birdseye View of Portney Castle



And part of an old Tower, that did not fall quite down with the rest, remains at (X) in the plan.

As Pl. XXV. represents the external appearance of the Wall that is shewn in the plan; from (a) to (b):*—so Pl. XXVI. represents the continuance of the Wall, with its Towers, that is shewn in the plan from (b) to (c).—Where we may again observe, still further marks of *Saxon* reparation, with herring-bone work, at the top of the Tower (b); as in the former Plate it was shewn on one side. And the courses also of Roman brick appear remaining most perfectly, in the Tower (c), at the usual distances. These rows are moreover seen remaining, in many parts of the intermediate walls, (or curtains) that have not been repaired, or covered;—and that, both at the top, and in the lower parts.

On the top of the Tower (c), are the remains of a more modern superstructure, which was probably a turret, containing apartments.

There was still existing, when I viewed the spot, a continuation of a similar Wall, and Towers, from (y to x):—amongst which were those of the great Decuman gate, (D), besides the three Towers (y, f, r). But, from w, to y, all had been thrown down when I was there. And just in the same manner as from (x to h), two very weak, modern, straight walls had been built more inward, at (wt), and at (ty);—leaving us however to perceive from obvious fragments, that the old Roman walls ran in the directions (woy), and (xzn).

The walls are, in general, about 10 feet thick; sometimes a little more, and sometimes a little less:—and in many parts above 20 feet high. And we can hardly doubt, but that, if we draw a line (vv), to cross that which unites the Decuman and Prætorian gates at right angles; that somewhere near its two extremities, in the parts of the wall fallen down, were originally those two other usual small Roman gates, called *Principales*: and that somewhere about (c), was the *Prætorium*.

* I am indebted for the Drawings of Pevensey, that were taken by the ingenious *Mr. Grim*, to the late *Sir William Burrell*; who permitted him to make exact copies of those in his possession, for my use.

It might perhaps be sufficient here, after describing these truly Roman works, only to take notice, that there was an area, or inner court, inclosed by walls and towers, partly Saxon, and partly Norman, which are shewn by the dotted lines (higm): and that there was a Saxon Keep on a mount at (t), (which, from the late existing remains,* though so small, does rather appear to have been square); and which was thrown down only a few years ago; (persons being still living who remember it).

That there was also a great *Norman* gateway between two towers, at (i); of the same form with such as are usually met with in our strongest Norman fortresses; and that there was a little sally port at (n): whilst in none of these walls of this inner court, do there appear any of the Roman work, or any of their regular courses of brick.

But as, in the account of Portchester, the comparing of the subsequent additional *Saxon*, and *Norman* works, might be useful; so here also, it may perhaps be better to endeavour to place the whole of the labours of successive ages, on this fortified spot, in such a light, as that they may be both fairly distinguished, and fairly compared together.

Therefore let us, in the first instance, observe; that here, as at Portchester, there seems to have been (though of an earlier, and therefore of a different construction, and smaller,) a *Saxon* Keep Tower, reared on a mount at (t), in one corner of the great castle area; near the outward wall; as a strong abode, for the residence of a Saxon Chieftain; an abode in the true Saxon style; in lieu of the more antient *Roman Prætorium*, that there is every reason to believe was in the area of the *Castrum*, somewhere about (e).

A view of the last remaining Ruin of this Keep, with its *Saxon* arch, is given in Pl. XXVII.

And, from such slight remains, nothing further can be said about it; than that probably the door way, in this view, appearing as *on* the ground; does appear so, only in consequence of the raising of the ground, above the top of the original Saxon mount, by means of the rubbish and ruins fallen down:—and that it might have been originally at some height from the original top of the *Saxon*

* Grose's Antiquities, Vol. II.



Modern appearance of the inside of that which was the Proetorian Gate of the Castle at Pevonsey.

S.H.Grimm del.

L.C.Stadler sculp.





Carderium Gate of the Caserma in Livorno.





J.H. Greenham del.

Walls of Pevensey Castle, Selsey.

J.C. Stander fecit.

PLATE I





[C. Studler sculp.]

A Fragment of the Walls of the Roman Castrum, at Trier, Germany.

311



mount; even though the steep ascent of the mount alone, (probably ascended by very steep steps) was itself a sufficient protection.

Leaving therefore this Saxon Keep, with the Saxon repairs of the Roman walls, as the only remains, *now* visible on this spot, of *Saxon* times; the great Norman works next demand our more serious attention.

And here we find, as at Portchester, a great inner court, or *Inner Ballium* inclosed;—in the walls of which no real mark either of *Roman*, or of *Saxon* workmanship, appears.

The Norman addition retained, doubtless, as at Portchester, the prior *Saxon Keep* as a mansion of state residence; but it had further great additions.

The whole court may fairly be said to be about 200 feet wide, every way, on an average; notwithstanding its irregularity, and the strange difference of its many unequal diameters.

It was protected by a broad, and deep ditch; even on the west, and north sides, next the outer court.—And at (i), Pl. XXIII. and Pl. ^{xxiii}, was a great *Norman* Tower of entrance, over a draw-bridge, which drew up against its front portal, between two projecting round towers: and this entrance was also fortified by a Portcullis, and double gates.

At (g), and at (m), were strong towers, with apartments, three or four stories high, for the use of the garrison, (in addition to the towers on each side the gate); and all these had only loop holes externally; for the annoyance of any enemy that should have broken into the outer court.

At (h) was a Tower of the same kind:—at the bottom of which was a sally port at (s); seeming to indicate, that however the *Roman wall* might have *originally* joined the rest at (n); that yet the outward inclosure of the *Utter Ballium*, or outer court, in *Norman* times, joined up merely to the side of the Tower (h).

At (n) was a sort of Postern gate;—which, from what appears in the bird's-eye view taken by Mr. Grim, may be suspected to have formerly led to a sort of *Barbican* (or advanced tower). But there was nothing sufficient remaining externally, when I visited the spot, to enable me to form any decided opinion in this respect.

There was also a sort of sally port; or small doorway leading

to the ditch ; in the wall, on the north-east side of the Tower (m).—

At (q) one of the old Roman towers was still preserved, as an additional protection (together with the old Roman wall) to the whole Norman inclosure.

For the better explanation of the whole, Pl. $\frac{xxvii}{4}$, shews the approach on the outside to this Norman *Inner Ballium* ; exactly as it was, in its ruined state, in 1783. At (z) is seen the appearance of the broken tower of the great gateway ; with a part of the adjoining ditch. And on one side, on the right, is seen the external appearance of Tower (h). And, at a distance on the left, is seen the appearance of Tower (g).

In Pl. $\frac{xxvii}{5}$, is shewn the interior appearance, within the Norman area, of the same wall ; from near the Tower (g) to the Tower (h), referring to the same letters in the plan. And in this view, at (i), is seen the internal appearance of the ruins of the great Norman gate of entrance. And at (h), the inside ruined appearance of Tower (h).

Pl. $\frac{xxvii}{4}$, shews the outside of the Norman wall ; from l, to g, referring also, by the same letters, to the plan, and bird's-eye view ; where is seen, on the left hand side of Tower (m), the little door, that has been mentioned, leading to the bank of the ditch.

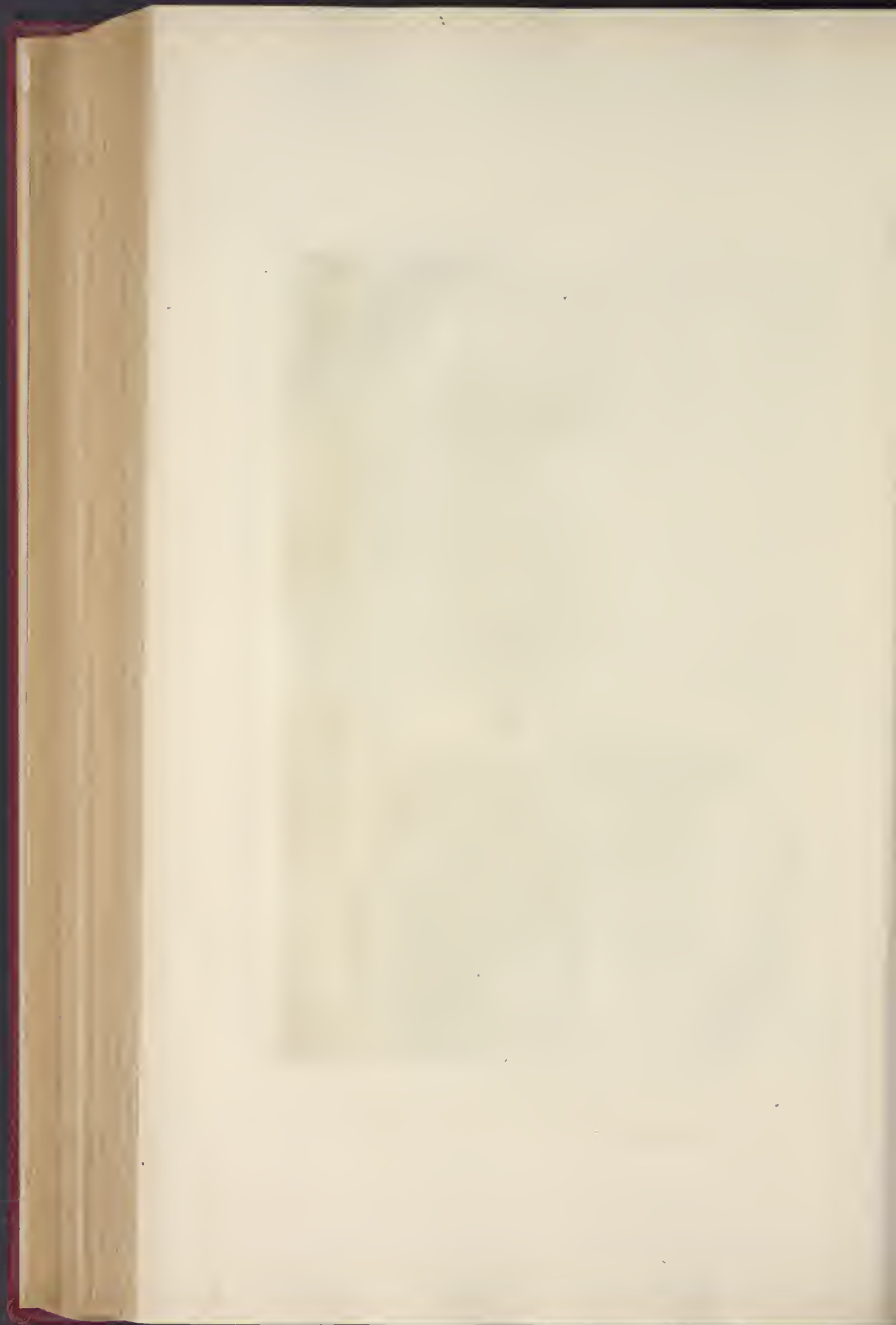
Pl. $\frac{xxvii}{5}$, shews the inside of this very Tower (m) ;—where, (besides the passage to a loop) appears, on the left hand side beneath, the arched passage of the doorway to the ditch. And in the upper apartment is seen a chimney place.

Pl. $\frac{xxvii}{6}$, shews the inside appearance of the strong arch in the Tower (h), leading to its sally port ;—the external appearance of which is slightly represented, and made rather too large, in the bird's-eye view.

Such, even in its very lately existing remains, was *Pevensy Castle* :—and there cannot be a doubt, but that in the later Norman times, there was also a large hall, with its kitchen, and butteries, in the inner court ;—whilst the towers of that court contained apartments for residence ;—and whilst the *outer court* both served for the encampment of such troops as were occasionally used for the defence

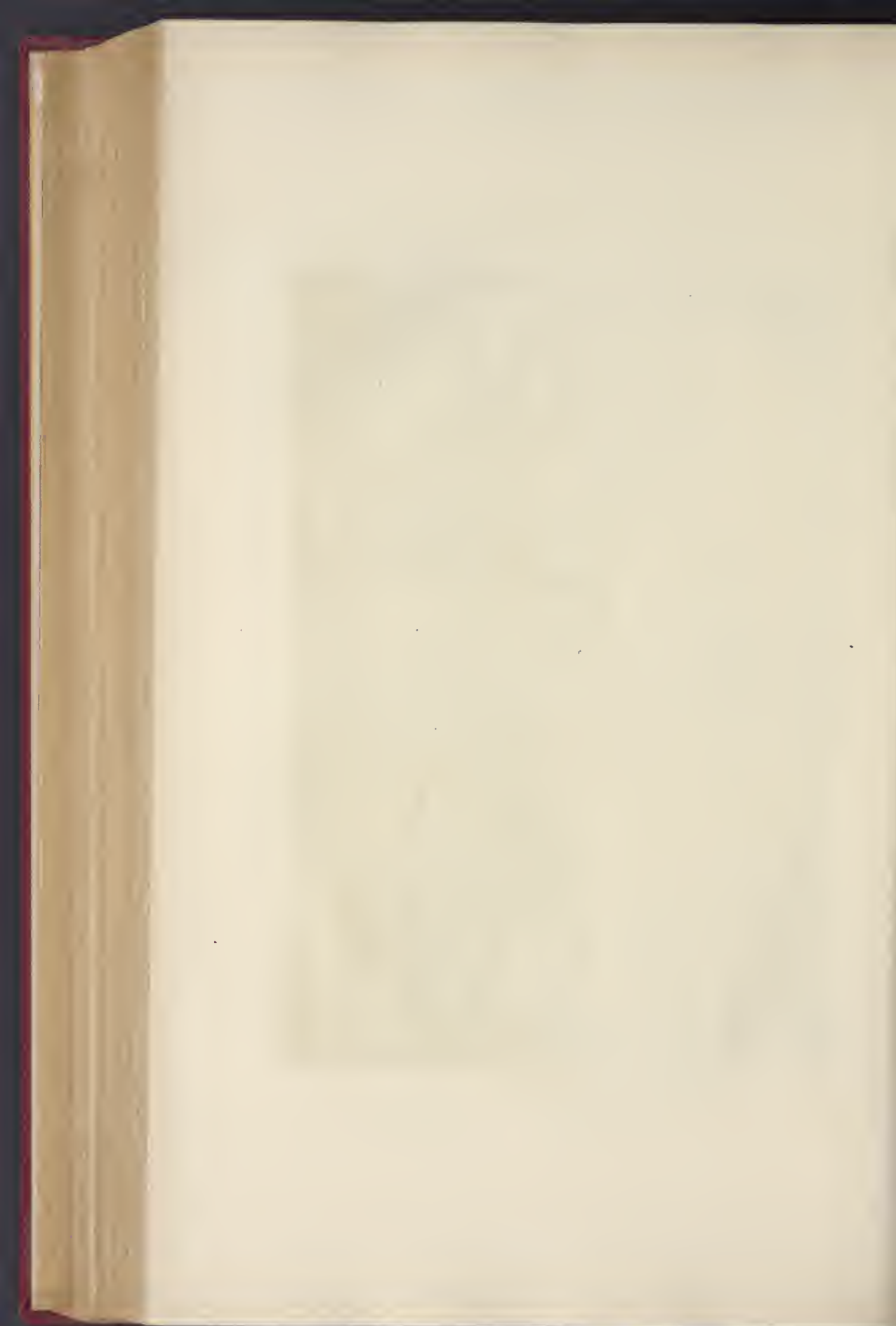


Norman Wall of Devenssey seen on the outside from g to h





Norman Wall of Downsey, seen on the inside of the river from near g to h





J. Ashmole, sculp.

J. H. Green, del.

Norman Wall of Conveney seen on the outside from 1.4

of this fortress; and also served, as a place of refuge, for the inhabitants of the adjoining country, and for their effects, on danger of any invasion.

And as we have so great manifest indications, in its still existing ruins, of Pevensey Castle having been originally a great *Roman Fortress*; so the very early mention which we find made of it, in the records of history, prove unquestionably its existence prior to the Norman times.

For we are told that *Duke Bertold* gave it to the Abbey of *St. Denis*, in 952. And again; that *Swane* landed here in 1049; when he carried off *Beorn*, and murdered him. Earl Godwin also, and his son, took it in the time of Edward the Confessor; and carried off many ships lying by it. And, on another occasion, in the earlier part of his life, the same great Earl had made use of it, as a shelter and protection for himself, with a fleet under his command.

In the neighbourhood of this Castle William the Conqueror landed: as is expressly marked in the Bayeux tapestry; which calls it *Pevenesæ*.* And afterwards, in the Norman times, it was

* It should seem, however, from the manner in which *Gemeticensis*, *Holinshed*,† and *Stow*,‡ speak of his landing, that, for some cause or other, it was not just at the Castle; but rather somewhere in the adjacent country;—where also he is said to have hastily fortified a piece of ground, as he did again at *Hastings*. But in neither place does he seem to have occupied the Castles. Whilst, on the one hand, the short time of his abode there, renders it impossible for him to have been the builder of them; and the whole style of the architecture of the walls of *Pevensey Castle*, shews *those* to have had a prior existence; as well as what is said of *Duke Bertold's* giving it to the Abbey of *St. Denis* in 952. Perhaps its being, *then*, in the hands of the Abbey, rendered this Castle, at the time of *Duke William's* landing, a peaceable place; void of molestation, or of being molested.

And what is here said, seems to receive considerable confirmation from what may be observed on the *Bayeux Tapestry*: for there, after reading, just over the representation of the transport vessels, these words, *Transiit et venit ad Pevenesæ*. And then over the representation of the landing of the horses, *Hic exeunt caballi de navibus*;—and then, immediately over the appearance of cavalry riding furiously,—*et hic milites festinauerunt Hastinga ut cibum raperentur*;—we then read after the representation of the repast, and of Bishop Odo's blessing the food;—and just over the figures of men digging;—*Iste iussit ut foderetur Castellum at Hestenga*; (*i. e.* literally, *He ordered that a Castle should be dug at Hastings*;) which plainly implies that this Camp, or Castle, was a *mere earthwork*: for there is no representation of a Castle or building here, as in other parts of the tapestry; whilst indeed the short

† *Holinshed*, Vol. I. p. 174.

‡ *Stow's Annales*, p. 99.

given by *Henry the First*, to *Gilbert de Aquila*; whence, with the vast possessions annexed, this distinguished portion of feudal property obtained the name of *The Honour of the Eagle*; and gave occasion to many minute circumstances of history, of importance at the time; but which now only serve to afford a proof of the frivolity, and insignificancy of all human greatness;—no one being, at present, in the least degree interested in them; and few having patience to read the detail of them.*

The sea, which seems formerly to have come up pretty near to the walls, on the side where the *Prætorian* gate was placed, is now at the distance of near two miles;—having receded from this castle, as well as from so many other fortresses on our coasts.

It remains only to add, for the sake of comparing the irregular form of this *Castrum*, with that of other irregular Roman fortresses and cities;—such as *Dover*, *Verolam*, and *Silchester*; where the irregularity of the most *useful* ground occasioned, in like manner, an irregularity in the form of the construction of the walls; that there is added, in Pl. XXVIII. fig. 11. a plan of *Pevensy*, reduced on a small scale.

time that William staid here, does not render the rearing of any real Castle of stone possible. The whole of the evidence of the Tapestry, † which is indeed a record of no small weight, tends therefore to prove, that William only landed on some part of the coast near *Pevensy*; and then marched directly, with all possible expedition, to *Hastings*; where he formed a fortified camp, for a short time; previous to his coming to an engagement with *Harold*;—and that he never turned aside to approach the old fortresses at *Pevensy*, or *Hastings*, at all.

We find, however, that when they afterwards, of course, fell into his hands, or when *Pevensy* was seized by the Conqueror;—that it was given by him, in the first instance, to *Robert Earl of Morton*, his half brother;—by whom, possibly, the original towers and walls of the inner court might be built; but built in a style of architecture, that perfectly shews their date to have been long subsequent to that of the great outer walls of the Fortress.—There are particularities in their style of construction, however, that seem to indicate, that some part of them at least might be built even so late as the reign of *Henry the Fifth*. But this will perhaps be better understood, by what will be remarked in the further progress of our observation.

* Many of these facts, with regard to the Honour of the Eagle, may be found abridged, in the account added to *Grose's Antiquities*, Vol. II.; and also in *Gough's Camden*, Vol. I. p. 202.

† See the curious Representations of the Tapestry, in the *Antiquitez de la Couronne de France*, Tom. I. tab. lx. and lxi.; and in the *Anglo-Norman Antiquities*, p. 17, 18. 22.

Inside of the Tower in at Faversham



J. G. G. del.

J. Richardson sculp.





J. Johnson del.

A. Richardson sculp.

Inside of the Sally Port in the Tower (N) at Bovensey



The examination of the plans, and mode of structure of these three great fortresses, at Richborough, Portchester, and Pevensey, is sufficient to explain the nature of the most perfect of the antient Roman munitions, in this Island. And almost every other Remain, that we can discover of their works, either perfect, or imperfect, will help to confirm the idea which the examination of these three conveys.

At *Castor*, in Norfolk, about three miles from the city of Norwich, we find the vestiges of another of the oldest Roman Camps in Britain;—where have been dug up a prodigious quantity of Roman coins, and medals; and also bronzes, and antient Roman lamps.

And here was plainly visible, a few years ago,* on the west side, the great *Decuman gate*, with one of its great round Towers remaining pretty entire; which latter had been built in the true Roman manner, with regular courses of long thin bricks, at certain intervals: only the intermediate courses, instead of being faced with *hewn stone*, which was not easily to be met with in this part of the Island, were faced on the outside, with bricks in the form of squares; whilst the long bricks, which composed the alternate *Θυλάια*, or courses, were about the usual size; $17\frac{4}{10}$ inches, or about a Roman foot and an half long; and 11 and $\frac{6}{10}$ inches, or a Roman foot broad;—and only 1 inch and $\frac{3}{10}$ thick.

Directly opposite to this gate was the Prætorian gate. And, what is very remarkable, in the area of this camp, and not far from the spot where the *Prætorium* must have stood, a church has been built in later ages;—much in the same manner as we find such sacred edifices were carefully placed, in lieu of the original *Prætorian Sacella*, at Richborough, and at Portchester.

The Camp itself was in the form of a parallelogram; about 440 yards, or 1320 feet in length, from west to east; and 360 yards, or 1080 feet in breadth, from north to south.

It had a very strong wall surrounding it:—of which there were considerable remains a few years ago;—and there are still some visible, in several parts. One of the round towers with which

* See an Account by Mr. Arderon, of the state of this Camp in 1749, in the *Philosophical Transactions*, No. 493. And in *Martyn's Abridgment*, Vol. X. p. 1295.

this wall was fortified, besides that adjoining to the Decuman gate, had a considerable part left standing above ground, till very lately.

And as the remains of a great *Decuman gate* were visible on the west side, next the river; and those of a *Prætorian gate* on the east side, next the open country; so there were also plainly to be traced, some years ago, two narrower entrances, on the north and south sides, opposite to each other; which answered to the usual *side entrances* in other Roman camps, called *Principales*.

In Pl. XXVIII. which has been constructed on purpose to represent, in one comparative point of view, the different appearances of the forms of different Roman *Castra*, this of *Castor*, reduced to a very small scale, is placed first; as it was indeed one of the first and most considerable in all respects.

In fig. 1. therefore, the dotted line shews the outside of the great ditch.

And the broad shaded line shews the vallum, and the great bank which now covers the remains of the walls built thereon: the foundations, and several parts of which, were open to the view a few years ago, from (1) to (2), from (3) to (4), and from (4) to (5): whilst considerable ruins of the walls, above ground, were also remaining in the intervals between these parts.

At (d), on the west side, was the great *Decuman gate*: one of the round Towers of which remained, overgrown with ivy.

At *p* was the *Prætorian gate*, most obviously.

And at *oo* were two openings; which seemed manifestly to have been the two side gates: or what were usually called the *principal gates*.

At (t) were the remains of another round tower.

And in the very wall of the *Castrum* itself, at (w), was a well of spring water.

At (c), is the Church of *Castor*; built not very far from the site of the *Prætorium*; which was probably at (s).

At *rr*, is the course of the river *Wentsum*, or *Wentsor*. On the side next which the *Vallum* was lower than on the other three sides of the camp. And a little on the other side of this river, near *Dunston*, seems to have been the burial ground, as urns have been dug up on that spot.

In this instance, therefore, (as we shall find to have been the case with regard to most other Roman castra) the burial ground is found to have been on the same side with the great Decuman gate.

It was so, in like manner, at Richborough; where the remarkable burial ground, near *Ash*, is on the western side of the Castrum, as the great Decuman gate is in the western wall:—and the reason seems obvious: because the martial funeral processions could better pass through the *Decuman gate*, than through any of the others.—And because, also, this side of the camp, was most remote from the quarters of the Commander in Chief, and from the tents of the *Contubernales*; and persons of the highest rank.*

This Castrum, which is understood to have been the *Venta Icenorum*, is justly imagined to have originally given occasion to the building of the city of Norwich afterwards in its neighbourhood.

And having mentioned the Church, built in succeeding ages, not far from the *Prætorian* part of this great Castrum; it would perhaps be an omission, not to remark, that in another Castrum of a square form, at no great distance; called *Taesburg*, or *Taesborough*, a modern *Norman* church is found, in like manner, to have been built *within* the fortress; † near the site of the antient *Prætorium*.

So in an antient Roman camp, of an oblong square form, about

* In an account given of Castor, by *Mr. Wilkins*, which has been published in the *Archæologia*, Vol. XII. p. 136. long since the observations above were written, the measures inserted are somewhat different: the eastern side being said to be 1120 feet; and the northern and southern 1349; and the contents of the area being estimated at about 35 acres:—but this difference seems to have arisen merely from the measures, in the one instance, being taken on the inside of the vallum, and in the other on the outside.

In the same account, also, the corners are said to be rounded off: but the round is indeed so small, and inconsiderable, that in a plan on such a small scale, as that here given, it can hardly be well represented otherwise than as square. The rounding off, of the corners, in other Roman camps, is often much more considerable.

There seems to have been also some little mistake, either in the printing of the *Archæologia*; or in *Mr. Wilkins's* account of the *Tower* remaining at the Decuman gate; for he says ‡ it is 33 feet in circumference; which mathematically will allow no more than 11 feet for the whole diameter. and if the walls had been only 4 feet thick, no more than 3 feet for the internal space;—a space not sufficient, even for a staircase.

† See Gough's *Camden*, Vol. II, p. 105.

two miles from *Caerdiff*, in *Monmouthshire*; on the side next *Cowbridge*, (containing 10 or 12 acres,) there appears the opening which formed the great Decuman gate, on the west side; and opposite to it a steep narrow entrance which formed the Prætorian gate; and, within the inclosure, near what must have been the site of the *Sacellum* of the antient *Prætorium*, the Parish Church.*

Burgh Castle, in *Suffolk*; near *Yarmouth*, in *Norfolk*; one of the great forts that was appointed for the defence of the coasts, under the command of the *Comes Littoris Saxonici*,† is a still more complete Remain; and still more nearly bears a resemblance to *Richborough*; being walled only on three sides; whilst two rivers, the *Yare* and the *Waveney*, near whose conflux it stands; and a great lake of water, form its protection on the fourth.

This lake is now called *Breydon Water*; being what is, in the common language of the country, called a *Broad*.

It is only a few miles inland from the mouth of the river *Yare*; and it is indeed very extraordinary, (considering the recess of the waters from so many other antient Castles,) that this has not long since, like the borders of the *Sarr*, in *Kent*, being turned entirely into marsh land.

Mr. Ives, who has given a very accurate and ingenious account of this *Castrum*, concludes very justly, that it was built in the time of the Emperor *Claudius*; which we have also had reason to be persuaded was the æra of the construction of that at *Richborough*. And it is very remarkable, therefore, that *here*, as at *Richborough*, the towers seem to have been added some time *after* the walls were completed.

The whole *Castrum* is seated on an eminence, also similar to *Richborough*; and is nearly in the form of a parallelogram; only having the corners rounded off; as is the case in so many other Roman fortresses.

It is about 214 yards, or 642 feet in length; and about half the breadth, or 321 feet; being nearly of the same dimensions with *Richborough*. And even, like *Pevensy*, it is made to correspond somewhat to the dimensions of the eminence on which it stands.

* See *Archæologia*, Vol. II. p. 13.

† *Horsley's Brit. Rom.* p. 472.

For *Mr. Ives* observed, that although the north wall formed a right angle with that on the east side; yet the south wall made an obtuse angle with it, of about 94 degrees.

On the fourth, or west side, (as at *Richborough*,) is a steep bank towards the river. And on this side unquestionably stood the *Prætorium*;—although, as to that circular mount, at the south-west corner, (which *Mr. Ives* took for the *Prætorium*) it may be suspected, from its form, and situation, to have been rather an additional work in *Saxon* or *Norman* times; raised in imitation of those circular mounts, which we meet with in so many *Saxon*, and *Norman* fortresses: and similar to the mount on which the old *Saxon* Keep stood, within the *Norman* inclosure at the south-eastern corner of the *Castrum* at *Pevensey*.

The walls, on the east, north, and south sides, are constructed of flints, the abundant produce of the adjacent country; with regular alternate courses of brick, (as in most other truly Roman buildings).

These bricks also are of the usual size; as they are at *Castor*; being about 18 inches long by 12 broad; and agreeing very nearly with the dimensions given by *Vitruvius*, and *Pliny*.

The height of the walls, at present, is about 14 feet; and their breadth nine: which is very nearly the same as in many parts at *Pevensey*.

And, as at *Richborough*, the number of the towers was small; so here also, in a fortress of equal antiquity, and of nearly the same size, there appear to have been only six:—four, annexed to the east wall; one about the middle of the south wall; and one about the middle of the north wall.

We may remark, that the number of towers also appears to have been small at *Castor* in Norfolk;—though at *Portchester*, and at *Pevensey*, as at *Nicopolis* in Egypt, (all of which were built somewhat later,) the number of surrounding towers was considerable.

Here, however, at *Burgh Castle*, exactly as at *Pevensey*, the towers are found to be all solid from the bottom to the top; only on the summit of each is an hollow cavity, about 2 feet in diameter, and 2 feet deep, as if merely for fixing some small wooden structure for a centinel.

These towers are uniformly constructed with alternate courses of stone, and rows of brick; as well as the walls; but were plainly

built *afterwards*; and are not conformed to the walls in the exact situation of their *Θεμελίαι*, or courses of brick, any more than those of the towers at Richborough.

On the east side, here; as on the west at Richborough, (that is uniformly *towards the OPEN COUNTRY*;) was the *Decuman gate*; almost in the middle of the wall; and between two towers: *—and on the opposite side must have been the *Prætorian gate*; with a way descending from the steep bank; as at Richborough.

Unless we will suppose this *Castrum* also to have been originally of a square form; and a great part of it to have been washed away.

The towers of the *Decuman gate* are very nearly of the same size as those at *Pevensey*; being about 14 feet in diameter.

And in the middle of the north wall appears an opening; that seems to have formed one of the side gates; usually called *Principales*: whilst the traces of another such may be observed, about the middle of the south wall.

The tower on the south side, and that on the north side, have both given way, and have sunk from their original upright position; but the others stand firm.

It is almost needless to mention, that in this *Castrum*, and its environs, have been dug up vast quantities of Roman coin; both silver and copper:—and fragments of brass; as rings, keys, buckles, fibulæ:—and amongst other things; a spoon of silver, answering, (like that described by Batteley, found at Reculver,) to the Poet's description;—

Sum cochleis habilis, sed nec minus utilis ovis. †

being pointed at the one end of a long handle, and having the bowl at the other; fit therefore both for picking fish out of the shell, and for eating eggs.

On the east side of the camp appears the burying ground; where vast numbers of Roman urns have been found; but no appearance of any barrow.

As in the former instances, so here, it may be useful to add a comparative representation on a small scale.

* See Mr. Ives's account. And also a View and Plan in Grose's *Antiquities*, Vol. III. and a good View by Buck. † *Martialis Epigramma*, xiv. 120, 121. And see Batteley's *Antiquitates Rutupinæ*, p. 124.

Fig. 2. Pl. XXVIII. therefore, is a plan of the Castrum called Burgh Castle.

The dotted line shews a rude sketch (for it cannot now be nicely ascertained) of the outside of the great Fosse.

The shaded line shews the foundations of the walls.

At *d* was the great Decuman gate, having two round towers, 3 and 4; at some distance, one on each side.

1, 2, 5, 6, are four other round towers.

And at *oo*, are the two side, or principal gates.

(*bb*) is a steep bank;—nearly as at Richborough.

And at (*k*) is a mount, which has been called the *Prætorium*; but was manifestly added in *Saxon*, or in *Norman* times; according to the mode of fortification then introduced.

At (*rr*) is the course of the river Waveney.

And on the eastern side, opposite to the Decuman gate, in a field, appears, from many unquestionable remains, to have been the burial ground; as at Chesterford: only there it was to the south; and here, to the east.*

At Chesterford, in Essex, are the traces of another great *Roman Castrum*; now almost levelled with the ground. On digging, however, into the bank, or apparent vallum, still existing, there appear, in numbers of places, the manifest foundations of the original great wall. It surrounded the whole of this great Castrum, which was, like that at *Richborough*, nearly in the figure of a square; but had the corners rounded off, more than those at *Castor*.

The wall itself was here again constructed of flints; with a vast, and even uncommon, quantity of cementing mortar inserted between them; and with rows of Roman bricks placed at proper intervals; but the bricks appear to have been in general rather thinner, and to have been placed rather further asunder, than in some other works of this kind; and are of rather more different dimensions: many of them being $16\frac{1}{2}$ inches, by 11; and $1\frac{1}{2}$ thick; whilst others are longer, and others shorter. Some also are of a very pale red; but others of a deep red colour, with an inward substance of a deep

* It is obviously apparent, in all the plans, that in the situation of the Decuman gate, in *Roman Castra*, no regard was had to the point of the compass; but merely to that which was thought the safest, and least dangerous side.

blueish colour; plainly bearing the marks, to this hour, of the streakiness, and rude working up of the clay.

In this wall, the place of the great *Decuman gate* may plainly be traced; and in a manner also that confirms all that has been observed with regard to Richborough; for there appears to have been a broad raised paved way, constructed of flints and mortar, passing directly through the gate; and carried out quite across the ditch surrounding the castrum, and even beyond it.

This gate is here situated on the southern side of the camp, nearest to the river. And on the western side were easily to be traced, a few years ago, the foundations of a way passing, in like manner, through one of the two principal, or *side gates*: but they were removing and carrying away the stones of the pavement as fast as they could, when I saw it in the year 1774.

This Castrum had also the advantage of a small rivulet; that was made to pass quite through it, in a channel, the remains of which are still to be discerned.

The present road, from London to Norfolk, runs quite through the camp; and, for many years, a considerable part of the old wall was remaining, fair, open, and exposed to view, near the turnpike gate, on the right hand.

The burial ground, which was on the south-east, or rather south side of this camp, not far from the Decuman gate, and near the river, has already been mentioned. And besides the stone coffins,* and urns found therein, and coins of the Emperor Claudius, and of many succeeding Emperors, there have been dug up, a bronze bust, and several instruments and utensils of brass, and of gold: and, what is most remarkable, a little urn of red earth, containing several *written* scrolls of parchment;—but it is greatly to be lamented, that they were dispersed, and destroyed, before any proper examination of their contents had been made.†

Fig. 3. Pl. XXVIII., in the comparative Plate, shews the plan of this camp at Chesterford, with the other of the comparative views.

The surrounding dotted line marks the outward ditch:—the shaded line shews the bank, covering the foundations of the walls.

* See the account of them in the preceding pages of this work, Vol. I. p. 300.

† Gough's Camden, Vol. II. p. 62.

At (*d*) was the great Decuman gate, with its paved way.

And at (*o*) were the visible remains of one of the side, or principal, gates.

At (*rr*) is the course of the river *Granta*.

And at (*a*) is the present mill;—near which was the burial ground; where the stone coffins and urns, formerly mentioned,* were dug up.

At (*b*) is the modern inn.

And just at (*l*), stands the present turnpike gate, near which, on the right hand, so great a part of the wall was left standing, in the fairest condition, only a few years ago.

ff shews the remains of a watercourse, which seems to have been originally carried through the camp very deep, that it might pass uninterrupted under the great fosse. And there is still another at *hh*.

Whatever towers there were here, if there ever were any of stone, are utterly destroyed above ground; and their foundations have not hitherto been traced in later ages.

Perhaps the towers constructed on the wall of this great fortress, might be merely of timber: for we are assured, by the best authority possible; that of JOSEPHUS; who was one of the most inquisitive, and one of the nicest observers of all the works of the Romans, that it was very usually their practice to erect only such: and that for the purpose of doing so, they had a numerous train of carpenters attending every camp.

To him, every thing the Romans did, was an object of most interesting curiosity:—and therefore his account of the Roman encampments, and *Castra*, (too seldom read, or at least too little attended to,) is one of the most informing we have: and it well deserves, on this occasion, not only to be referred to;—but to be inserted as a part of the best information that can be given.

His description indeed more immediately relates to their mere temporary camps, formed on their marches; but it contains so much elucidation of all their *usual* operations, that it may, on many accounts, be more useful to refer to it here, than when we come to take notice merely of those occasional camps: and especially as it

* Vol. I. p. 200.

contains a full explanation of the mode of *beginning* all the works of *Paulinus*, and of *Agricola*.

“ As soon as they have marched into an enemy’s land, he says,*
 “ they do not begin to fight, till they have walled their camp about ;
 “ nor is the fence they raise rashly made, or uneven. Nor do they
 “ all abide in it : nor do those that are in it take their places at
 “ random. If it happens that the ground is uneven, it is first
 “ levelled. Their camp is square by measure ; and *carpenters*
 “ (*τεκτόνων πληθους*) are ready, in great numbers, with their tools, to erect
 “ their buildings for them.

“ As for what is within the camp, it is set apart for tents ; but
 “ the outward circumference hath the resemblance to a wall ; and
 “ is adorned with towers at equal distances ; whilst, between the
 “ towers, stand the engines for throwing arrows, and darts, and for
 “ slinging stones ; and there they lay all other engines that can
 “ annoy the enemy, all ready for their several operations.

“ They also erect four gates, one at every side of the circum-
 “ ference ; and those large enough for the entrance of beasts, and
 “ wide enough for making excursions, if occasion should require.
 “ They divide the camp within into streets, very conveniently ;
 “ and place the tents of the commanders in the middle : but in
 “ the midst of all is the General’s own tent, in the nature of a
 “ temple.

In short, “ the whole appears to be a *city*, built on a sudden ;
 “ with its market place, and place for handicraft trades ; and
 “ with seats (or stations) for the officers, superior, and inferior :
 “ where, if any differences arise, their causes are heard and de-
 “ termined.

“ The camp, and all that is in it, is encompassed with a wall ;
 “ and that sooner than one would imagine ;—by the multitude and
 “ the skill of the labourers. And a trench is drawn round the
 “ whole, whose depth is four cubits, (*i. e.* six feet,) and its breadth
 “ equal.

“ They live together in the camp by companies. And each
 “ company hath its wood, and corn, and water, brought to it as is

* *Josephus de Bello Jud.* lib. iii. cap. 5. sec. 1, 2, 3, 4, and 5.

“ needful. And they neither sup nor dine as they please themselves singly ; but all together.

“ When they are to go out of their camp, the trumpet gives a sound : and instantly they take down their tents, and all is made ready for their march. When the trumpet sounds again, they lay their baggage suddenly upon their mules, and other beasts of burden, and stand as at a place of starting, ready to march. At the same time setting fire to their camp.—And when the trumpet sounds a third time, a crier, standing at the General’s right hand, asks them thrice, *whether they be ready*. On which they, all lifting up their right hands, answer, *we are ready* ; and march forth directly, without noise, and keeping their ranks.

“ The foot are armed with breast-plates, and helmets ; and have swords on each side : but the sword which is on their left side, is much longer than the other ; that on the right side being not longer than a span. The foot, chosen from the rest, to be about the General himself, have a lance and a buckler ; the rest of the foot soldiers have a spear, and a long buckler ; besides a saw, and a basket, a pix ax, and an ax ; a thong of leather, and an hook ; with provisions for three days.

“ The horsemen have a long sword on their right sides, and a long pole in their hand. A shield also lies by them obliquely, on one side of their horses ; with three or more darts in a quiver, having broad points. They are armed also with helmets, and breast-plates, like the foot soldiers.”

Having inserted this curious and animating account, from *Josephus*, for the sake of shewing the Roman practice of erecting oftentimes mere wooden towers, to defend the walls of their camps ; (which probably might be the only towers ever existing at Chesterford) ; and for the sake of explaining, on this occasion, both their mode of living therein ; and of their decamping ; nothing can be more interesting to us, than to attend to his minute description of the *order of their marching* ; which that most intelligent Historian seems to have beheld with the utmost admiration.

And this description the rather deserves our notice in this place ; because it really carries us back, in imagination, to the very scenes that presented themselves, when either *Suetonius Paulinus*, or *Agricola*,

or even *Vespasian* himself, and *Titus*, marched, in this Island, from any one of these very *Castra* we are describing, or from any one of their inferior camps, and stations, to another.

Whilst the circumstance mentioned in the preceding account, (so usually unheeded,) of the number of carpenters, and builders, that regularly attended a Roman camp, fully explains the rapidity with which their wooden towers were so often reared, on the walls, or mounds of their camps: and also points out to us the reason why, even in their stationary residences, the apartments of all the Roman officers, and generals, and even those in their *villas* when settled, were so usually built merely of wood, and timber; in consequence of which circumstance alone it is, that so few traces of them remain, although so many of their beautiful mosaic pavements, that were covered by such apartments, are often discovered.*

The march of *Vespasian* from *Ptolemais*,† to fall upon *Galilee*, where such dreadful devastation was made in the beginning of the war, is thus described.‡

“ Those auxiliaries which were lightly armed, and the archers, “ marched first; that they might prevent any sudden insults from “ the enemy; and might search the woods that looked suspiciously, “ and were capable of ambuscades.—Next to these followed that “ part of the Romans, which was most completely armed; both “ horse and foot; (usually called the heavy armed.)—Next to “ these followed *ten out of every hundred, carrying together with their*

* Of the rapid works of their carpenters, besides building towers of timber, on the walls of the Roman camps, and besides erecting tents and barracks in their camps, we have a curious instance, in the account of the siege of *Jerusalem*:|| where we find, three Towers of attack, each 50 cubits, or 75 feet, in height, were very soon erected; which were so heavy, they could not be overturned by the enemy;—though one of them, for want probably of a sufficiently solid bank of earth to stand upon, fell down from its own weight. *Josephus* adds, they were so covered with plates of iron, that the Jews could not set them on fire.

† The present *Acre*.

‡ Those who recollect that these had, above other regions of *Judæa*, the advantage of our *Lord's* presence and discourses; and are curious to learn what this devastation was; may do well to consult *Josephus de Bello Jud. lib. iii. cap. 4. sec. 1. Cap. 7. sec. 31. Cap. 7. sec. 34. Cap. 10. sec. 9.* where they will find the very lake of *Gennasereth* was stained with blood.

|| *Josephus de Bello Jud. lib. v. cap. 7. sec. 2.*

“ arms what was necessary to measure out (*i. e.* to form) a camp.—
 “ After them came such as were to make the road even, and
 “ straight; and if it were any where rough, and hard to be passed
 “ over, to plain it; and to cut down the woods that hindered their
 “ march; that the army might not be in distress, or tired with their
 “ marching. Behind these came such carriages of the army as
 “ belonged to (VESPASIAN) himself, and to the other commanders;
 “ with a considerable number of horsemen for their security. And
 “ then THE EMPEROR marched himself, having with him a
 “ select body of foot, and horse, and pikemen. After these came the
 “ peculiar cavalry of his own legion: for there were an hundred and
 “ twenty horsemen that peculiarly belonged to every legion. Next
 “ to these came the mules, that carried the engines for sieges, and
 “ other warlike machines of that nature. And after these came
 “ the commanders of the cohorts, and the tribunes; having about
 “ them soldiers *chosen* out of the rest. Then came the ensigns,
 “ encompassing the Eagle, (which is at the head of every Roman
 “ legion;) the king, and the strongest of all birds; which seems to
 “ them a signal of dominion, and an omen that they shall conquer
 “ all against whom they march. These sacred ensigns are followed
 “ by the trumpeters. And then came the *main army*, in their squa-
 “ drons, and battalions, six men in rank (*σι; ἕξ λατίνων*) each
 “ (*division*) followed at last by a centurion; who according to
 “ custom inspected their order. As for the servants of every legion;
 “ they all followed on foot, leading the mules, and other beasts of
 “ burden, bearing the baggage of the soldiers. And behind all
 “ came the whole multitude of the mercenaries, who brought up the
 “ rear, for the security of the whole army; being in full armour;
 “ and having horse (*to support them*).”

The same venerable Author describes the march of *Titus*, to besiege *Jerusalem*; in a manner that clearly shews the same order exactly to have been preserved.

And as, on that occasion, he nevertheless expressly says,* that *TITUS*, according to the Roman usage, went in the front of the army, or went before the army, (*προαγων τὴν δόρυμν*) we may hence, and from the foregoing description, the more fully understand with precision,

* De Bello Jud. lib. v. cap. 2. sec. 1.

what alone was usually meant by the *Roman Historians*, when they tell us, that any Consul, or Emperor, marched *at the head* of his troops; and may perceive, that it was not, as has sometimes been supposed, a rash or inadvertent situation.

Josephus was so great an admirer of the Roman discipline, and order; and it was to him so great a novelty; that he plainly attributes to it, under the guidance of Divine Providence, all their wonderful successes. Though at the same time it is a most remarkable fact; that this celebrated chieftain of the Jews, who fought so stoutly in their cause, yet expresses, from first to last, a firm conviction, that the whole dire catastrophe which, at last, befel his nation, was decidedly of *Divine Appointment*.* A tacit testimony to the truth of the predictions of Our Blessed Lord in the Gospel: even stronger than could have been borne by any Christian †

The engines of war, that were conveyed with a Roman army, on its march, in the manner described by Josephus; and which were planted on the walls; or mounds, of such camps as this at *Chesterford*, and together with battering rams, used in besieging towns, were, as the accurate Observer informs us, ‡ such as threw many lances, at once, with a great noise;—such as threw fire, and a multitude of arrows, without any noise;—and such as threw stones, even of a talent (or 113 lb.) weight prepared for the purpose.

Thus, by this intelligent Author, we are brought, almost to stand in imagination, on the original walls of *Chesterford*. The referring

* De Bello Jud. lib. iii. cap. 5. sec. 1.—Lib. ii. cap. 19. sec. 5.; cap. 22. sec. 1.—Lib. iii. cap. 7. sec. 51.

† At the same time that this venerable Jewish Author, both *Priest*, and *General*, bears this remarkable testimony; it is well deserving consideration; that so far from being a *Christian*, or inclined to embrace the knowledge of the Gospel; he did, for want of apprehending the spiritual sense of the predictions concerning THE MESSIAH, make such a representation of all the promises concerning *The Messiah's* coming, in his celebrated Book of Antiquities, as can only afford an opportunity for blasphemers to blaspheme.

However he most fairly, and honestly, related the truth in his own days; it cannot be presumption to say, *he did not understand the Divine Prophecies*; or even the usages and customs of high antiquity. He relates both, in his Jewish Antiquities, in such a manner, as only tends to increase uncandid objections: whilst yet he was really wishing to recommend the Holy Scriptures, as Jewish annals, to the notice of *Vespasian*, and the Romans.—St. Paul took a surer, and a better way.

‡ De Bello Jud. lib. iii. cap. 7. sec. 9.

to his words, therefore, cannot be a digression; whilst we have every degree of probability to lead us to conclude, that in this camp, at *Chesterford*, VESPASIAN himself abode;—and from this very camp marched, exactly in such order as Josephus has described.

We have not indeed in the great *Castrum* at *Chesterford*, that has been the subject of the preceding observations, any vestiges of the *Prætorium* remaining: for the greatness of the place probably occasioned the more effectual destruction of all the buildings it contained.

But in a smaller Camp in Kent, about two miles from Canterbury, and as much from Heppington; which seems to have been not a great *castrum*, but a mere summer camp; consisting merely of earth works double trenched, and containing about eight acres, the site of the *Prætorium* still remains entire; rising, like that at *Richborough*, only a *small height*, of three or four feet above the rest.*

On the tract of the great Roman Way, also, from *York* to *Manchester*, in the township of *Saddleworth*, at a place called *Castleshaw*; were remains, in the year 1766, of another Roman camp of earth work, in which the site of the *Prætorium*, was to be distinguished; and on which account it is called, in the first volume of the *Archæologia*, a *double Camp*.†

Here appeared the place of the Decuman gate at (*d*); see Pl. XXVIII. fig. 4.; and remains of the enclosure of the *Prætorium* at (*p*): beyond which there was doubtless a *Prætorian gate*.

We are informed also,‡ that in a camp at *Bolton*, in South Wales, the remains of a *Prætorium* (or rather of the *Sacellum* of a *Prætorium cum alis*;) were to be very fairly discerned.

And still more evidently are the remains of a *Prætorium* to be discerned, in a camp called now *Melandra Castle*, in Derbyshire.¶

A slight sketch of it is added, Pl. XXVIII. fig. 5.

The ramparts (*aa*)—(*bb*), which have still considerable quantities of hewn stone remaining in them, were defended by ditches; but those (*cc*), (*ff*), were secured in part by great declivities, and a sort

* See also Gough's *Camden*, Vol. I. p. 244.

† *Archæologia*, Vol. I. p. 215.

‡ *Ibid.* Vol. III. p. 116.

¶ See a description of it in the *Archæologia*, Vol. III. p. 236. Pl. XII.

of precipices; as we have seen was the case on one side of each of the fortresses at *Richborough*, and at *Burgh Castle*.

At P, are foundations of a work, about 25 yards square, which seems most obviously to have been the *Prætorium*.

At (d), therefore, seems to have been the *Decuman gate*, on the north-east side; and also towards the near adjoining river, the *Mersey*, or *Edron*, (rrr); as at *Castor*, and *Chesterford*. And about (g), was found a stone, with a Roman inscription, which plainly indicates that the burial ground was near this spot; in a situation, therefore, just beyond the *Decuman gate*; similar to that at *Chesterford*.

There was also here a *subterraneous stream* of water: which one cannot but compare with that made to pass through the camp at *Chesterford*. But whatever towers there were here, have been destroyed, as well as those of *Chesterford*.

In a small Roman station, or fort, in Cumberland, called *Little Chesters*,* or the *Bowers*, about half a mile from *Hadrian's vallum* to the south, the *Prætorium* may again be distinguished; and there seem to have been towers at the corners of that fortress; and also in some parts of the sides; the ruins of one of which are still very visible.

In the station or fort of *Great Chesters* also, (between three and four miles from hence, along the *Picts' wall*;) the site of the parade of the *Prætorium* is still more manifest; in dimensions about 50 yards from east to west, and 40 from north to south; to which is joined another parallelogram, at the east end, of the same breadth with the *Prætorium*, and 25 yards from east to west.†

And it ought not to be omitted; that in the greatest of all the *Chesters* remaining; at *Chester itself*, in Cheshire, to this hour, the situation of the Church of *St. Peter's*, seems to be, as far as can be concluded from a variety of concurrent circumstances, very near the spot,‡ (if not precisely upon it,) where the *Prætorium*, of that great *Castrum*, or Roman city, stood.

Whilst here, throughout the city, (which still retains its original square form; and walls repaired almost precisely on the same spot where were placed the original Roman walls,) may be discerned

* See Gough's *Camden*, Vol. III. p. 244.

† *Ibid.* p. 225.

‡ Pennant's *Tour in Wales*, Vol. I. p. 169. 156.

the two great streets crossing each other, as was usual in every Roman Castrum; and at their extremities, the exact situation of the two side gates; the *principalis dextra*, and *principalis sinistra*; and also that of the *Prætorian*, and of the *Decuman* gates.

And as, in this instance, we still have a modern city remaining on the very spot, and within the very walls of an antient *Roman Castrum*; it may not be amiss on this occasion to observe, that Antiquaries seem often to have taken a vast deal of unnecessary pains, to discover *where* the old *Roman Cities*, belonging properly to celebrated *Castra*, were precisely situated;—not duly considering, how small, in general, *Roman Cities* were;—and that very frequently, there were indeed none others than the identical respective *Castra* themselves.

Thus at *Silchester*, and at *Verulam* also, there were instances of *Roman Castra* being converted into *Cities*; or being indeed originally the very *Cities*. And even in Italy itself, what was originally a *Camp*, at *Puteoli*, became a *City*.*

A few other circumstances, concerning these celebrated fortresses, deserve yet to be attended to.

In Wales, at a small distance from the Castle of *Caernarvon*, near the steep bank of the river *Seiont*, in a situation, naturally, and of itself most important, and commanding; are curious remains of a small *Roman Castrum*; the walls of which are pretty entire on two sides. But it is only about 148 feet in length, and 128 in breadth; and therefore unquestionably was merely a sort of fort; though the height of the remaining walls is still 10 feet 8 inches; and their thickness 6 feet. The peculiarity of the *Roman masonry* appears in them; and there seems also to have been an external facing on the outside. And here is moreover a remarkable circumstance worthy to be attended to; somewhat similar to that which has already been taken notice of at *Richborough*, and has also been mentioned with regard to some of the walls of *Severus*: for, along the walls, are three parallel lines of holes, not 3 inches in diameter, nicely plastered within, which pass through the whole thickness; whilst there are also similar holes discovered, in the end of the wall, seeming to run through it lengthwise.

* Livy. Lib. xxxii. cap. 7.

+ Pennant's Tour in Wales, Vol. II. p. 220.

These holes, therefore, too small for ordinary loops; too numerous for pipes for conveyance of sound; can, as far as appears to me, be considered in no other light, than as having been indeed the mere cavities left by the small timbers which braced the sides of the temporary wooden *caissons* together, when the walls were constructed; and which therefore were drawn out as those frames or caissons, for containing the stones and mortar poured in, were removed upwards, from stage to stage. The mortar with which they appear to be plastered, on the insides, was probably only such as had made its way through, on being poured in amongst the stones; and was smoothed, like plastering, simply by the very operation of drawing out the small bars of wood. We can indeed scarcely conceive how any regular operation, for the purpose, could be performed in so small a cavity as three inches square, of the length of 9 or 10 feet, or more;—and it is therefore most likely these cavities were left open, only because no danger was to be apprehended from them, on account of their smallness;—and because they might be of use to hasten the drying of the wall.

Near the corner of one of the walls here, was also discovered, on digging a few years ago, the foundations of a round Tower; which circumstance, in this instance ascertained in so small a *Castrum*, and compared with other discoveries of a similar kind, in other remains of larger Roman *Castra*, may justly be allowed to convince us; that almost all the *Castra*, in Roman times, were indeed fortified by the addition of such towers; wherever they were not merely hasty transitory encampments, fortified with mere earthworks. And even then, we may be assured they had temporary wooden towers, placed sometimes on the mounds, or *valla*, by those numerous carpenters, who Josephus informs us constantly attended their camps.

Those kind of Roman earthworks, which, as well as the walled *Castra*, formed some of their *stations*, do now, therefore, demand our attention:—and especially as there are remains of such of them in this country, as were undoubtedly the works of *Agricola*; one of the greatest and most skilful commanders the Romans ever had, either in this Island, or in any place whither their arms were carried.

A remarkable specimen of one, is described by *Mr. Pennant*,* as situated at *Comerie*, at no great distance from Perth, in Scotland. And has again been still more fully described by General Roy:†—but nevertheless, on account of some circumstances relating to it, deserves to be mentioned again on this occasion. For though what was really *the Roman station*, is sufficiently to be distinguished; yet a little perplexity, in the apprehensions that have been formed concerning it, has been occasioned by an adjoining work of a different kind.

In Pl. XXVIII. which contains the comparative view of *Roman Castra*, I have added, at fig. 7. a sketch of it, on a small scale;—which is copied from *Mr. Pennant's*; because his drawing was taken at a time when the area, that seemed to have been designed for the *Prætorium* of the station, appeared better defined, than when *General Roy* viewed it; at which latter period the area of the *Castrum* had been ploughed up.

The works found at *Comerie*, taken all together, evidently consist of two camps. The largest of which at (a) *Mr. Pennant* was informed, on the spot, had commonly been deemed by the neighbouring inhabitants, the Roman camp. And a Roman camp, we have indeed reason to believe it originally was; though not used at the same time with the other, which appears to have been the real *Roman station*; situated on the brow of the high bank (bbb). And though the four entrances are found to be so irregularly placed, and so oddly fortified,‡—in a manner so very different from the usual *Roman mode*, as bespeaks a work, that either was not originally Roman, or else has been since used by different people, and become so changed, that it does not retain precisely, its original characteristic marks.

General Roy says, it is 1020 feet long; and 950 broad;—and takes it to have been decidedly an original temporary camp of *Agricola's*; formed for the encamping of his whole army, for a few nights only, on his first expedition; some time before the

* *Pennant's Tour in Scotland*, Part II. p. 96. Pl. IX.

† In his *Military Antiquities*, p. 63. Pl. XI.

‡ See a very exact representation of this odd mode of fortification, on a large scale, in *General Roy's Military Antiquities*, Pl. XI.

forming of the other regular *Castrum*, as a station, for a smaller force.

But he acknowledges the gates are unlike those of Roman camps, in general;* which he found, almost uniformly, in all other instances, to have been defended, by a mere *traverse*; (or *short bank, and ditch*.) placed just before, and fronting the gateway, at a little distance.†

He acknowledges also, that the two side gates, here, do not stand directly opposite to each other, as in most Roman camps.

And, besides this, there appear to have been some *high rude stone pillars*, erected within this camp; quite contrary to any Roman custom.

And, what is still more remarkable, the Camp itself evidently intersects, or is intersected by, a Military Roman Way, leading directly to the other *Castrum* on the bank (bbb).

Although, therefore, this might indeed have been originally a temporary Camp of Agricola's, for a night or two only, when marching with his whole army;—yet here are *indicia* sufficient to shew, that it must have been used also by other people; and altered, in after ages:—when its entrances were thus fortified, in a manner so different from that of the Romans. Whilst the *stone pillars*, which, (if they were pre-existing,) the Romans might not take the trouble to remove, (being to rest for so short a time,) together with an adjacent *barrow*, do seem to prove, that this spot was at some time or other, independant on the Romans, a distinguished place of attention to the rude original *Caledonians*.

The other fortress, on the bank (bbb), seems indeed most truly to have been a regular *Roman station*; and has with good reason been concluded to have been that called *Victoria*; founded by *Agricola*, on his return from the battle with *Galgacus*. (vw) shews the Roman Way leading to it; which intersects the Camp (a), in so strange a manner, as proves that these two fortresses never could have had any sort of connection, one with another, as coexisting for any pur-

* An exact representation, of these entrances, also, on a still larger scale, may be seen in General Roy's *Military Antiquities*, Pl. XI.

† See *Military Antiquities*, p. 66.

pose of mutual protection; but that the Camp at (a), was either *prior* to, or *subsequent* to the existence of that on the bank (bbb). And in either case, of no sort of importance, during the period that the latter was in use.

At (t) is marked the place of the *barrow*, or tumulus; and at (y), the place where the high stones stood.

The real *Roman station*, on the bank (bbb), deserves to be described more particularly.

General *Roy* thinks a part of it, where the bank (bbb) is, has been washed away by floods of the adjoining river. A circumstance that seems probable enough; as otherwise the *Prætorium* appears to have been quite close to the steep bank. But, whether that has been the case or no, there is the utmost reason to believe that there has always been some steep bank on the side of the Camp next the river:—on account of which advantage, the original situation of the spot seems to have been chosen, and fixed upon; just as in the instance of the *station* at Richborough.

The bank (bbb) rises above the water of Ruchell (rrr), even in a manner that indicates it must have done so originally; though at an early period it might have been nearer to the river.

The part of the *Castrum* marked (p), Mr. Pennant clearly discerned to be distinguished from the rest of the area of the Camp, and to have belonged to a *Prætorium*; whilst he remarks particularly, that he could find nothing like any remains of a spot so designed for a *Prætorium*, in the other Camp (a). General *Roy* even thought this *Prætorian* part was fortified with additional strength.

At *Ardoch*, not far from *Comerie*, in the part of Scotland rendered so interesting by the campaigns of *Agricola*, is a second *Roman station* of this kind of mere earthwork; having not merely one other entrenchment; but even two or three other entrenchments near adjoining.

These General *Roy* justly apprehends to have been, as well as those at *Comerie*, prior in existence to the regular station itself; and to have been mere temporary Camps of *Agricola*'s.*

* *Military Antiquities*, p. 62.

And there is the utmost reason to coincide with him in opinion ; but they must have been in use *at some very different periods of time*. For here, as at *Comerie*, are works upon works ; and entrenchments so intersecting each other ; and so interrupting the regular uniformity of the parts of each other ; that they never could be considered as having any proper connection one with another.* Considering them, therefore, as having no sort of relative relation to, or proper connection with, the real *Roman station* itself, whilst that was in use ; it may be proper to neglect any further mention of them ; and to proceed to a more minute description of the *real station*.

A sketch of it is added, amongst the comparative representations of Roman Fortresses, in Pl. XXVIII. at fig. 8.†

It was, in truth, one of the most important of the fortresses constructed by *Agricola* ;—situated on an elevated spot, at the head of extensive low grounds, and of two vallies ; the one leading to *Sterling* ; and the other to the open tract called *Strathmore*.

And it deserves our attention, both because it was without doubt constructed by that celebrated Commander ; who is said to have been always so judicious in the choice of his situation, that no camp formed by him, was ever taken by storm, or obliged to surrender ;‡ and also, because *more* numerous outworks, and fosses, properly belonging to it, remain entire here, than in most other *Castra* ;—and because we have here again a very remarkable instance of a camp that bears, in its internal form, and disposition, a strong affinity to the *Castrum* at *Richborough*.

We find it, like that fortress, seated on a steep bank (bbb) ; which secures the west side.

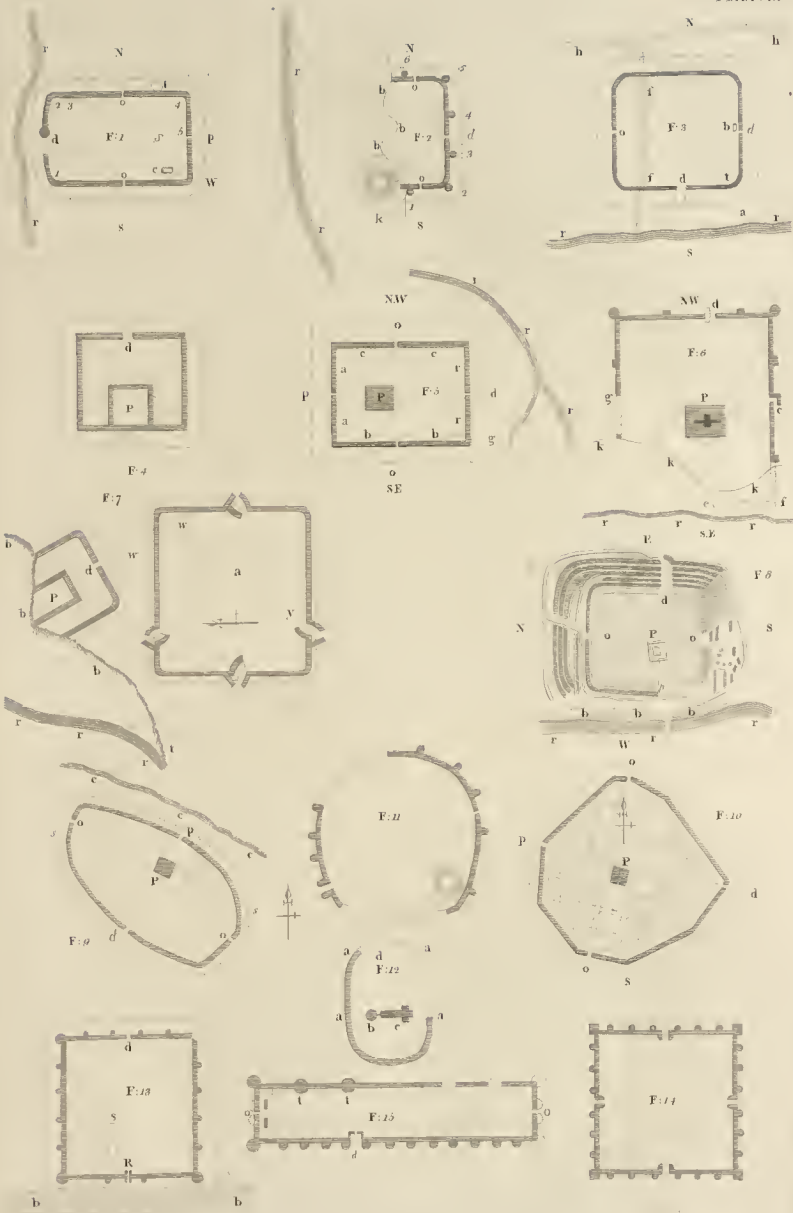
Its dimensions are, according to Mr. Pennant, 450 feet, by 400, in the internal area ;—but according to General Roy's plan, about 490 by 425 ;—which bear some resemblance to the contents of the areas of *Richborough*, and *Burgh Castles*.

The four entrances, are nearly in the same sort of relative

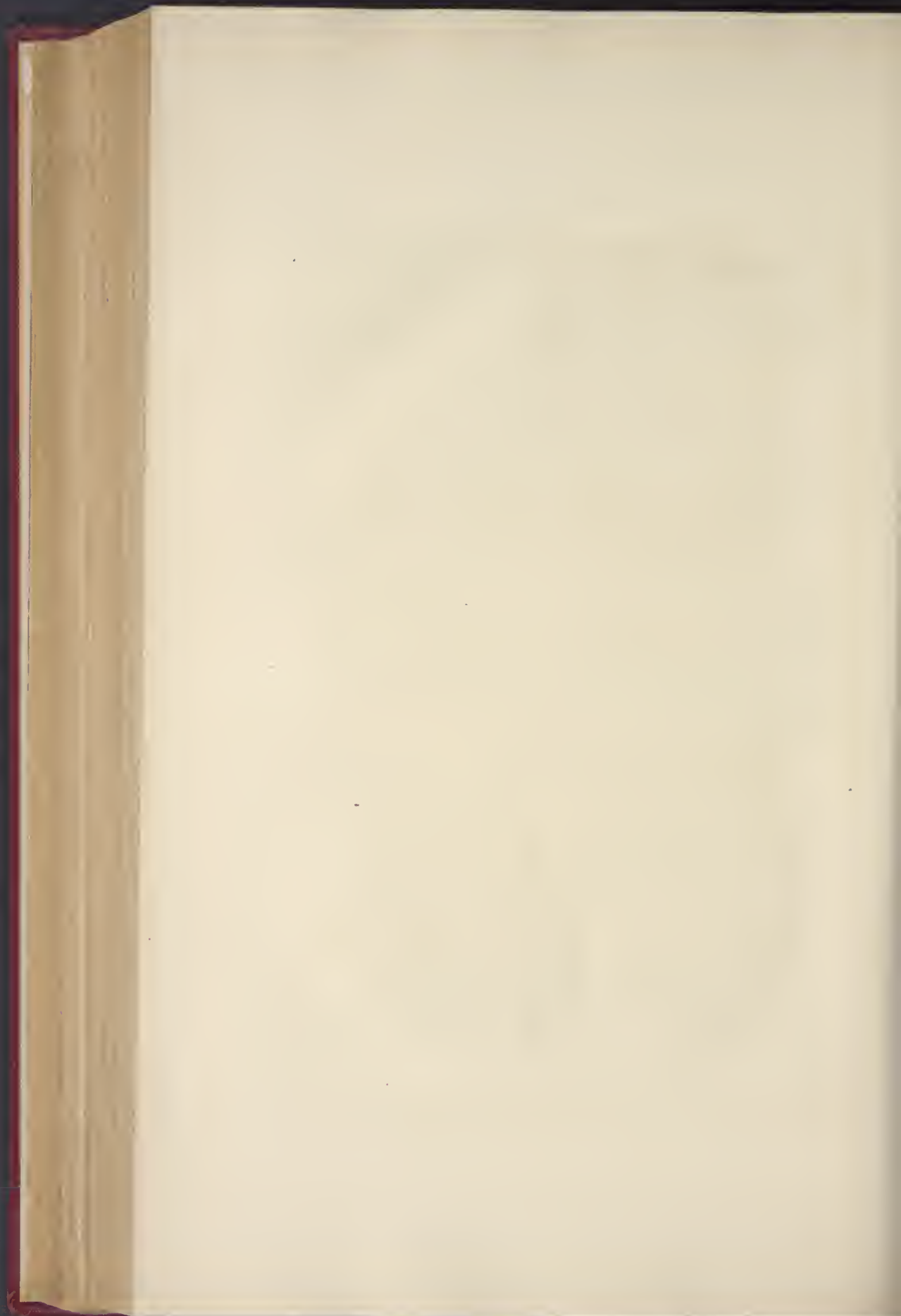
* They may be seen delineated, with great precision, in the *Military Antiquities*, Pl. X. In which work also, is an exact delineation, Pl. XXX. of the real *Castrum*, on a large scale.

† A very curious account, and representation of it, may also be seen in Mr. Pennant's *Tour in Scotland*, Part II, p. 101. Pl. X.

‡ Tacitus. *Vita Agricola*, cap. 22, 25.



Comparative View of Roman Castra



situation as in those other fortresses;—and the Prætorium (P), here as at Richborough, is somewhat nearer to one of the side or principal gates (oo), than to the other:—and much nearer to the *Prætorian gate* (p), than to the *Decuman gate* (d). And from the Prætorian gate (p) here, as there, was the descent, down from the steep bank (bbb), to the river (rrr), the *Kneck*; or *Knaig*;—which latter, like the *Sarr*, is now become only a very small stream.

The three sides of the Camp, which have not the advantage of any bank, had five (and, on one side, even six) fosses, of a great depth; with ramparts of correspondent heights between; on which, in Roman times, were unquestionably placed temporary wooden towers. But, on the side next the steep descent, there is only one fosse.

It has been curiously remarked by General Roy,* that notwithstanding this vast attention to the perfect munition of the place; yet that, either from hurry, or some other cause, the Prætorium seems to have been marked off somewhat irregularly; and not having its sides truly parallel to those of the station.

This, however, may be to us the less surprising;—because we have seen an instance of neglect of *minute regularity* at *Richborough*; in the varied thickness of the north-eastern wall; † and cannot but remember, how far the north-western wall is from forming a straight line. ‡

From an inscription upon a sepulchral stone, dug up at this place, it is certain that, at some period or other, the first cohort of *Spanish auxiliaries* lay here in garrison;—and many parts of *ephippia*, and of bridles;—and of spears, and other armour;—and Roman coin; and a Roman altar; have been dug up here.

One other great earthwork of the Romans, it may be useful to mention:—the representation of which, may most properly be borrowed from the *Military Antiquities of General Roy*;—both in justice to the accuracy of that excellent work;—and also, because this *Castrum*, does in reality so clearly decide the fact, as to the real, and true situation of the *Decuman gate*.

This earthwork, is that of the Roman station, at *Birrens*, near

* *Military Antiquities*, p. 126.

† See p. 6.

‡ See Pl. XVI.

Middleby, in *Annandale*;* supposed to have been the antient *Blatum Bulgium*;—and carefully to be distinguished from *Birrensworth Hill*.

It is here represented, Pl, ^{xxviii}/₃.

And with regard to it, we may observe, in the first instance, that it was defended, on two sides, by steep precipitous banks, against the windings of the river *Mean*;—which banks seem to have been *so original*, as that the other great protecting works, of fosses, and mounds (one only excepted), appear to have been discontinued originally, almost precisely where they now end, on account of *that* advantage;—and not to have been ever carried much further than we now find them; or to have had any considerable part of them washed away. And, therefore, this appearance may lead us to conclude, with great fairness, that indeed the precipitous banks, both at *Burgh Castle*, and at *Richborough*, and at *Ardoch*, were original defences.

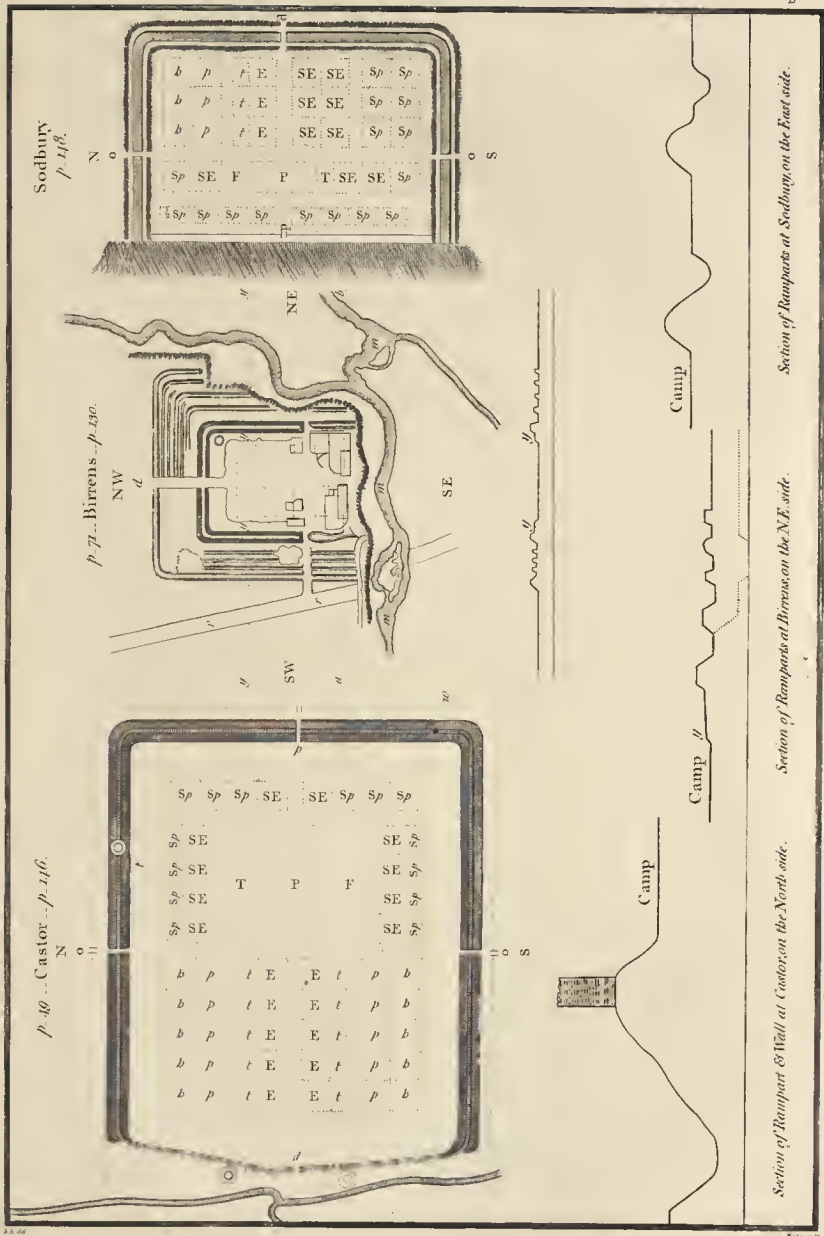
In the next place, we may observe, that the great gate, or entrance, which, from the decided magnitude of its width appears to have been the *Decuman gate* (*d*), was here, as at *Richborough*, next the most open and plain part of the country; and furthest from the river *Mean*; (the part to be defended):—whilst the *Prætorian gate*, must have been next that supposed to have been the *more* dangerous part; that is next the river.

The antient Roman Way (*rr*), also, may be observed to have ran by the side of one of the *principal gates*, down to a part of the river, which seems, by the aid of a sand bank, and island, to have been fordable in that part.

In this curious earthwork, also, remains clearly an interior bank, or sort of covered way, next the great vallum, at (*y*); which sort of raised covered way, probably, did also exist at *Richborough*;—and was, perhaps, one of the causes of the internal area there, appearing now so much higher than the external ground around the walls.

There are remains of foundations, near, and around the *Prætorian* part of this fortress, at *Birrens*, which hardly seem to have belonged to Roman times; but they are here given, as General Roy has given them.

* See Military Antiquities, Pl. XXIV. p. 118.





There is added further, from his delineation, a *section* of the works; as they would appear in the direction of a line (*ab*); where the elevation of the covered way all round appears at (*yy*).

There seems also here, to have been somewhat of a pool, (or sort of *tank*) within the works;—as we may remember there was a well, in the outward wall, or great vallum, at *Castor*.*

The Roman station at *Chew Green*, so accurately delineated by *General Roy*,† will also probably occur to the minds of the curious, on this occasion; as still further illustrating what has been here remarked:—and the rather; because, in this instance also, there are other more extensive, but slighter temporary camps adjoining, (such as *General Roy* supposes to have been the hasty larger camps of *Agricola*, on his marches,) and so intersecting one another, as plainly shews that they could never have been in use at one and the same time.

It is a most curious fact, that so many of these slight temporary entrenchments, near these Roman stations, should at all exist at this day;—and that they do so, can be accounted for perhaps only from the part of Scotland where they are found having been so uncultivated, so sequestered, and commonly so unmolested.

Some others of them, even in parts remote from regular stations, afford us an opportunity, of examining more closely the whole manner of the encamping of Roman armies, which ought not, on this occasion, to be neglected.

There is, near *Kirkboddo*, a most curious and almost perfect work of this kind; which will serve to shew the great extent, and slight construction of these temporary camps for a large army, in comparison of those Roman *Castra*, that were designed as strong holds, to contain a small body of troops in a *station*.

And they will also serve to shew how small a body of troops, in comparison of an whole Roman army, even those magnificent *Castra*, at *Richborough*, *Portchester*, and *Burgh Castle*, could contain.

This camp near *Kirkboddo*, represented (from *General Roy*'s exact delineation of it, †) Pl. $\frac{XXVIII}{3}$, is concluded, from a consistency

* See p. 50.

† In his *Military Antiquities*, Pl. XXII.

‡ See *Military Antiquities*, Pl. XIV. p. 67.

with the accounts given us by Polybius, to have been adapted to the containing of a single legion, with its allies ;—amounting in all to 9600 ; or about 10,000 men.

And it is about 2280 feet in length, by 1080 feet in breadth. Dimensions vastly beyond the *Stations*, or *Castra*, at *Richborough*, and *Portchester*.

The Prætorian gate (according to the conclusions in the preceding pages,) seems to have been at (*p*) ;—and the Decuman gate at (*d*) ;—and the two principal gates at (*oo*). And beyond these were two other side gates, at (*qq*), which seem to have existed in these larger camps, at the end of another cross street, called sometimes *Quintana*.

All these gates, or entrances, are protected by *traverses*, consisting of a short bank (or vallum), and ditch, similar to the bank (or vallum), and ditch, surrounding the whole camp.

And what is here again deserving attention ;—as there was a well in the wall at Castor,—so here seems, at (*w*), to have been a pool of water, purposely taken in, as a part of the munition.

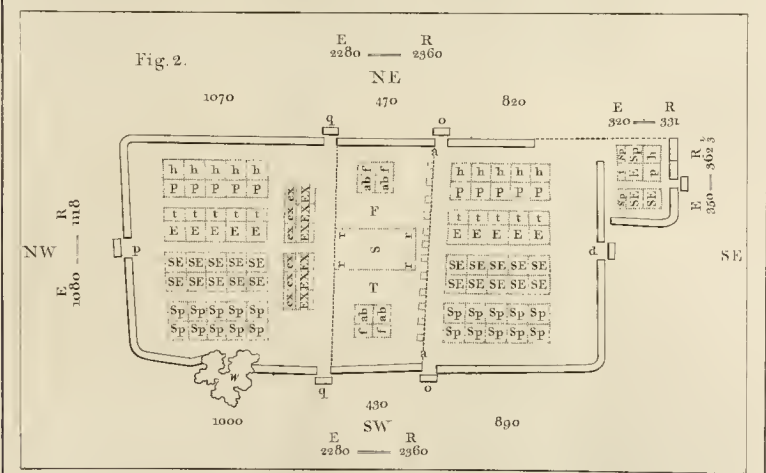
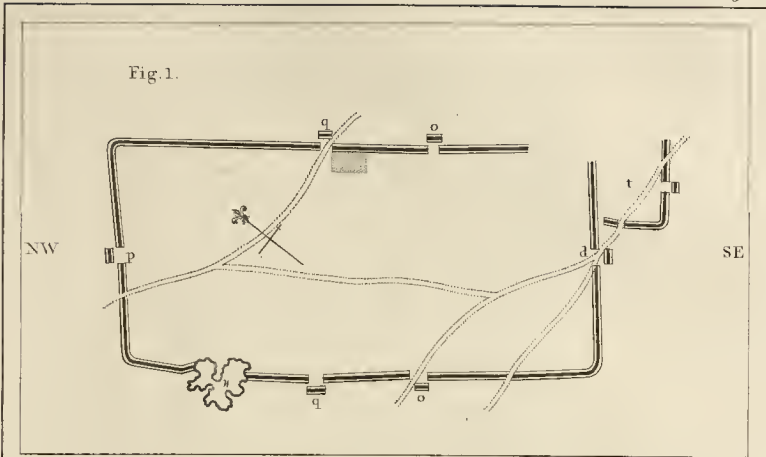
To this curious remain of the Camp at Kirkboddie, we find, at (*t*), a very remarkable appendage of a smaller, irregular, nearly square encampment, of about 350 feet by 320, adjoining to the south-east corner ; which General Roy supposes* might be designed as a Procestrium ; and might be added, because of the great Camp being made, by mistake, too small for the number of men then present ; or else for some fresh accession, or detachment, that had joined the army.

And however that were, I cannot but add, that the existence of it may receive some sort of further illustration, from a passage or two in *Livy* ; by which we find that the Romans did really sometimes incamp their forces *in two different camps* ; a larger, and a smaller ; in order to keep raw troops, newly arrived, distinct from a veteran army.

Thus when *Paulus Æmilius*, and *Terentius Varro*, arrived at *Geronium*, with fresh supplies, for the army there encamped against Hannibal, we read, that,

Ut in castra venerunt, permisto novo exercitu ac vetere, castris bifariam factis, ut nova minora essent proprius Annibalem, in

* Page 67.

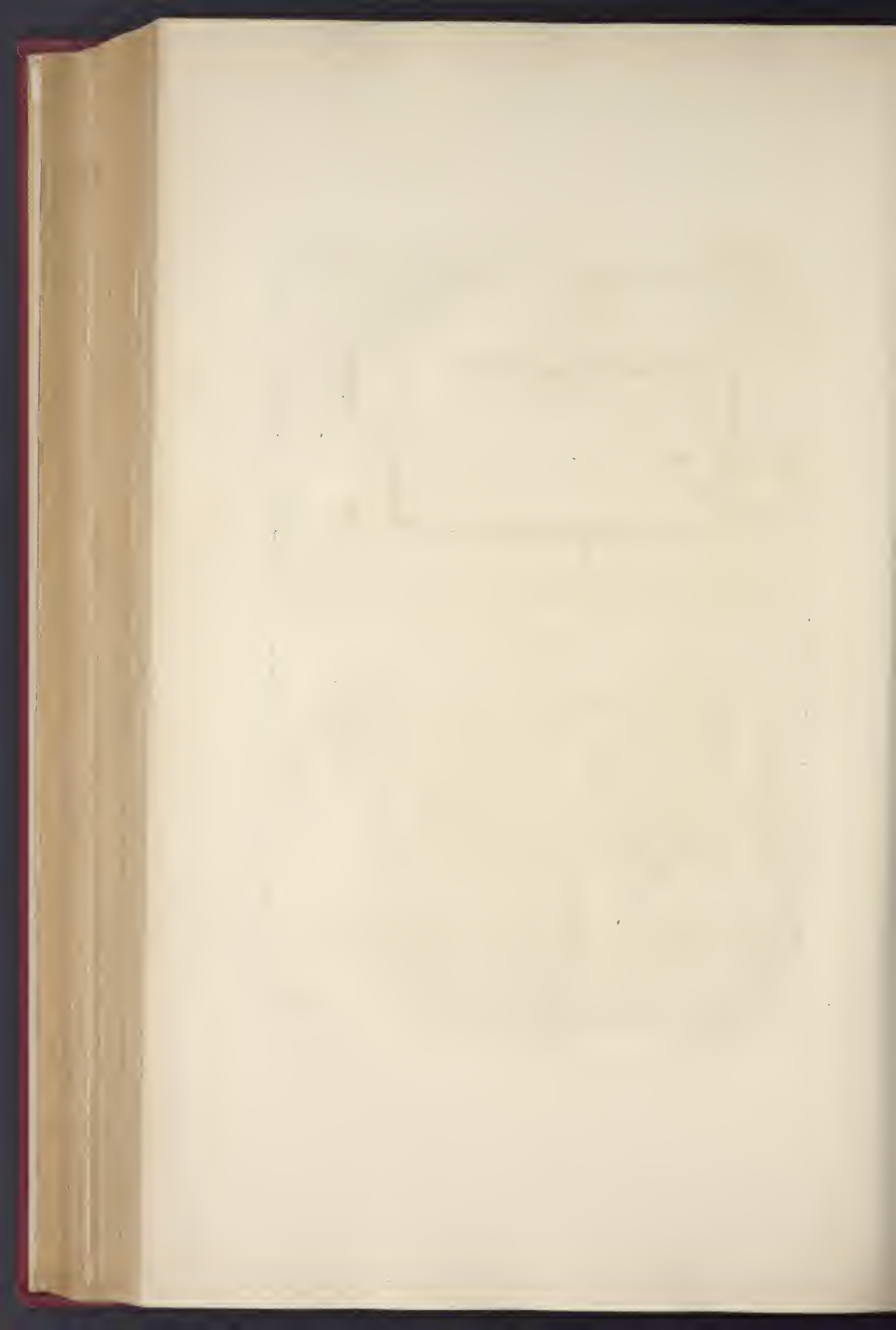


Mode of Encamping Roman Troops at Kirkboddie.

L.L.S.

Published in R. A. Smith's *Journal*, 1887.

Arch. 206



veteribus major pars, et omne robur virium esset; tum Consulium anni prioris M. Atilium, ætatem excusantem, Romam miserunt; Geminum Servilium, in minoribus castris, legioni Romanæ, et socium peditum equitumque duobus millibus præficiunt*.

When they arrived at the camp, the new army and the old being united, and two separate camps being formed, that the new and lesser might be nearer to Hannibal, and that the greater part of the army, and all the chief strength of their forces might be stationed in the old encampment; then,—of the Consuls of the former year,—M. Atilius they sent to Rome, his age excusing him; and Geminus Servilius they appointed to the command in the smaller camp, over a Roman legion, and two thousand allies of horse and foot.

Which, we may perceive, was what was usually deemed a weak legion, consisting of about 4500, or at most 4700 horse and foot; with this 2000 only (not half the usual number) of allies, or auxiliaries.

And again, when by the rashness of *Terentius Varro* they were obliged to encamp in a very disadvantageous spot at *Canna*;—yet we find the prudence of *Paulus Æmilius* making the same distinction of *two Camps*; placing the one, on one side of the river *Aufidus*, and the other, on the other side.

Ubi in conspectu Pœnum habebant, bina castra communiunt, eodem fere intervallo, quo ad Geronium, sicut ante, copiis divisis. Aufidus amnis utrisque castris affluens, aditum aquatoribus ex sua cujusque opportunitate haud sine certamine dabat. Ex minoribus tamen castris, quæ posita trans Aufidum erant, liberius aquabantur Romani, quia ripa ulterior nullum habebat hostium præsidium.†

When they came in sight of the Carthaginian, they fortified two camps, with nearly the same interval between them as at Geronium, their forces being divided as before. The river Aufidus, flowing near to both camps, afforded access to the waterers from each, according to their opportunity, though not without some contest. But from the lesser camp, which was placed beyond the Aufidus, the Romans watered the more freely, because the further bank had no guard of the enemy.

We may fairly conclude, therefore, that for some reason or other,

* Livy. Lib. xxii. cap. 40.

† Lib. xxii. cap. 44.

Agricola was induced, in a somewhat similar manner, to form a small separate camp, for some fresh supplies, here at Kirkboddo.*

And we ought perhaps also to observe, that here at Kirkboddo, we have a curious proof, that though the scientific tactical plan of a Roman camp was, according to Polybius, exactly regular in the disposition of all its parts, yet, that in the actually forming of their camps, they were not attentive to minute precision:—for no two sides here are either exactly of equal length; or straight; or set square. And it may be remembered, that one of the walls at Richborough is not straight;—and that at Burgh Castle, the walls do not stand quite square.

Having given so plain an account of this Camp; it may now be proper, in order to render our ideas of the nature of Roman fortresses more perfect, to make some inquiry with regard to the mode of their abiding in these *Camps*, and *Castra*.

A single legion, most usually consisted of 4200 foot, and of 300 horse;—and was composed of the following different *corps*, (as we should now call them);—

1200 *Velites*, or light armed troops.

1200 *Hastati*,

1200 *Principes*,

600 *Triarii*,

300 *Equites*; or Roman knights;—forming the cavalry.

4500

To all which there almost constantly was an addition of *Auxiliaries*, or *Socii*, consisting of 4200 foot,
and 900 horse;

5100

causing the amount of the whole regular force to be 9600 men.

The *legionaries* were always embodied by their *tribunes*; who were six in number to every legion; and whose peculiar business it was to enrol;—to administer the oath;—to embody;—and to muster the soldiers:—and to punish their offences.

* We shall find, that it was capable of containing either one cohort, with its *auxiliaries*;—or two cohorts without *auxiliaries*.

The *Hastati*, and in like manner, the *Principes*, were subdivided into ten *maniples*, (or *maniples*); each consisting of 120 men, including six officers to every *maniple*; which officers were, a *Centurion* commanding the whole band;—a subordinate Centurion under him;—two Ensigns, or *Vexillarii*; (to bear the *Signa*, or *Eagles*);—and two *Tergiductors*, whom perhaps we should call *Lieutenants*.

The *Tribunes* appointed every *first Centurion* out of the soldiers in each *maniple*;—these so appointed, named the *subordinate Centurions*;—and these together appointed the other officers.

The *Triarii* also, though so much fewer in number, were divided into ten *maniples*; each consisting of 60 men, including the same number, and distinction of officers.

And even the 300 *Equites*, or cavalry, were divided into ten *Turme*, or troops, consisting of 30 each; including also six officers; namely, three *Decurions*, or (*Captains*); of whom one was chief;—and three *Sub-decurions*; one of whom seems to have carried the *Vexillum*, or standard.

But it is very remarkable that nothing is said, about any subdivision of the *Velites*. They therefore seem to have been considered as mere skirmishing, untrained troops; attending upon the several bands of the others; and acting in subserviency to them.

A *maniple* of *Triarii*, with one of *Principes*, and one of *Hastati*, formed a *cohort*, consisting therefore of 300 men, to whom most probably were usually added an adequate number of *Velites*; or about 120.

From the *Socii*, or *allies* of every legion, the consul chose 840 foot, and 300 horse, who were called *Extraordinarii*; and always encamped near the *Prætorium*;—and a part chosen again further, out of these, and called *Selecti*, or *Ablecti*, formed a body guard.

In other respects, we may conclude the *Socii* were subdivided, nearly in the same proportion as the body of the *Legionaries*; being indeed most frequently no otherwise a different body from them, than that they were troops raised from the allied cities in Italy; whereas the legionaries were *Roman citizens*.

From the accounts given by *Polybius*, and the best informed contemporary historians, who (like *Josephus*) were eye witnesses of the discipline and order of the Roman armies, we learn, that

The *Velites*, or light armed troops, who were designed merely

for skirmishing, and are affirmed by Polybius to have consisted, professedly, of those that were youngest, and of the lowest condition, were armed with a leathern helmet;—a round buckler of wood, called *parma*, covered with leather, and about 3 feet in diameter;—together with a sword; a javelin; and six small darts, carried in the hollow part of the shield; whose points were so fine, that if they did not pierce they bent, and could not be flung back again. And oftentimes also a *Velites* had a sling; or a bow and arrows.*

The *Hastati*, (who were the fresh, heavy armed, recruits) were armed with an helmet, generally of brass; and with boots; and with a breast-plate of brass;—and a long wooden buckler, or *scutum*, of a somewhat semi-cylindrical figure, covered with a thin plate of iron, and all round its edges by a band of iron;—together with two long spears, and a sword.

The *Principes*, who were the thoroughly well trained troops; were distinguished on that account only;—and were armed just in the same manner as the *Hastati*.

And so also were the *Triarii*; (who were the picked, and chosen veterans;) only these last had their spears much shorter, and much thicker; which were on that account generally called *pila*—*piles*; as these troops sometimes were called *Pilani*.†

The *Equites*, or horse, were armed (after the Grecian manner) with an helmet; a breast-plate; a round shield; a lance; and a sword,

* This circumstance is mentioned by Josephus, who frequently saw them; but it is omitted by Polybius.

† See Varro, lib. iv. 16. Vegetius, lib. i. 20.—The *piles*, or javelins of the *Triarii*, Polybius expressly tells us, were not slender like darts, or common spears; but were very heavy instruments:—a palm (or about 3 inches) in diameter, when round; or the same in thickness, when square; whilst they were only about 4, or $4\frac{1}{2}$ feet in length, and had a very heavy head of iron.

From this shortness, and great thickness of the pile, or spear, (which was probably an usage derived from more antient warlike nations, and 'is perhaps an argument that may induce us to suspect the first Romans to have been descended, some how or other, from the Philistines,) we may best understand the propriety of the expression in Holy Writ, concerning *Goliath the Philistine*;—that *the staff of his spear was like a weaver's beam*. 1 Samuel, chap. xvii. ver. 7. An expression, which from our habit of referring, in our ideas of a spear, to the long Norman spear, is apt to render the account, at first sight, too hyperbolic.

which Josephus says was in some instances long;—and he also informs us, they were sometimes armed with two or three darts, carried in the hollow of their shields. But in the first ages of the Roman power, they trusted merely to a slight quivering lance; and a little round buckler, covered only with leather; and had little else of armour.

From the same curious eye witness, Josephus, we learn, that amongst both horse and foot, there were, in the later ages of Roman greatness, some persons who, after the example of the Grecians, had other more complete armour covering them than the mere breast-plate, and boots; and somewhat nearer approaching to what we should call a complete coat of mail.

And as a confirmation of this fact, we are told by Polybius, who lived so many ages before Josephus, that all those who were rated above 10000 drachmæ, (*i. e.*, at about £310. or £312. of our currency,*) even amongst the Hastati, as well as amongst the Triarii, were armed with a complete coat of mail.

Some of them also, occasionally wore sharp pointed nails, at the bottom of their boots, to enable them to tread, and stand the more firmly.†

We learn from Polybius, as to the Allies, or *Auxiliaries*; that they were raised, and enrolled by their *Prefects*, from the allied cities in Italy, exactly in the same manner as the Legionary troops themselves were by their *Tribunes*. And we may gather, from the whole of his account, that they were armed nearly in the same manner:—had javelins of 2 cubits, or about 3 feet in length, and of the thickness of a finger, with the iron part about a span in length, and exceeding taper;—a supply of which they carried in the hollow of their shields;—whilst the convex shield they bore, 4 feet long, and

* The *Attic drachm* was about $7\frac{1}{2}d.$ of our currency; and the Roman denarius, (which was probably what Polybius alluded to) about $7\frac{3}{4}d.$

† Josephus tells us an interesting little anecdote, of an heavy armed *legionary*, a *Centurion*, named *Julian*, at the siege of Jerusalem, who had adopted this custom: and was deemed one of their firmest, and bravest soldiers. This man had put many Jews to flight; and in the presence of *Titus* rushed into the outer Court of the Temple; but coming upon the fine marble pavement, he, from this very cause, first slipt about from side to side; and then fell on his back, with a grievous fall, and was slain;—though not without great difficulty, because of the closeness of his armour. De Bello Jud. lib. 6. cap. 1. sec. 8.

2½ broad, was made of planks, covered first with glued linen, and then with a shell of iron, and edged with iron.

The representations of each of these kinds of armour may be seen very fairly delineated, amongst the representations of the sculpture on Trajan's Pillar.*

For the accommodation of all these several bands, in the field, one tent was usually allotted to 8 men;† on a space about 10 Roman feet square;—to which was added a space of 5 feet by 10, for arms;—and then one of 9 feet by 10, for bat horses. The whole including an area of 10 feet by 24; having an additional space of 1 foot left all round the tent, for the convenience of pitching it.

* See *Bartoli's* most curious Representation of the Sculptures; Pl. IV. VIII. XI. XV. XX. XXXIV. LXXVII. LXXIX. LXXXII. where the form of the helmets;—the semi-cylindrical shield;—the mode of bracing on the breast-plate with leathern thongs;—the shortness, and form of the sword, with its point and two edges, and the mode of carrying it on the right side;—the length of the spears;—the figures of the standards, and the mode of carrying them;—the distinction of the various common *Signa* of the *Maniples*, from one another, and from the *Vexilla*;—and from the *Eagles* of the *Legion*; particularly in Pl. XV. XX. XXXVI. XLIII. may all be most plainly distinguished. As also the skins on the heads of some of the *legionaries*;—the short garments;—and the naked legs of the soldiers, with the bandages at the bottom of their legs;—and their mode of carrying the implements for dressing their provisions, on the top of their spears, on their marches.

The armature also, of the Consul,—and Tribunes,—and Centurions,—under their *Togas*, or mantles, are shewn:—together with the slight armour of the horse, which is remarkable. And the inferior armature of the Allies may also be discerned;—and especially in Pl. LXXXII.——And the *Clavion* of the horse,—the *Lituis*, winding round and round at the extremity, like a ram's horn, is clearly distinguished, Pl. V. VIII. XIX. XXX. XLI. LXXVIII. LXXXI. XCV. from the *Tuba*, the trumpet of the foot. Shewing how obviously those beautiful lines of *Horace* described a fierce engagement both of horse and foot.

Jam nunc minaci murmure cornuum

Perstringis aures: jam litui strepunt.

Carminum, lib. ii. ode 1.

—— et lituo tuba

Permistus sonitus.

Carminum, lib. i. ode 1.

Whilst the lines of *Ovid* described the exact forms of the two instruments.

—— tuba directi—æris cornua flexi.

Ovid *Metam.* lib. i. 93.

The same distinctions also appear in the figures on the Antonine Column.

† This fact we learn from the curious and scarce fragment of *Hyginus*, brought fully into light by General Roy, p. 176. 180. *Hyginus* lived about the time of Trajan.

And as to the mode and order of forming an Entire Camp;—we learn, from the substance of what has been said by Polybius, concerning the forming a *Consular camp* for two legions, with their allies; and by what has been said by other authors; when their accounts, and intimations, are fairly compared together, and allowed to illustrate each other;

That first,—a Standard, or *Eagle*, was placed *where*, by the Consul's appointment, the Prætorium was to be fixed at (+s), Pl $\frac{\text{xxviii}}{4}$.

That then;—the sides on which the *Decuman*, and *Prætorian* gates were to be placed being determined, a space was set off, in both those directions, and in the transverse direction, of *one hundred Roman feet each way*;—with an area comprising about *four Roman acres*.

This General Roy, and other commentators, suppose to have formed a square of 200 feet, for the whole area of the Prætorium; and that it was only 100 feet each way from the centre.*

But herein I must beg leave to differ; and rather to conclude, that the whole area formed for the *Prætorium*, was in reality of 400 feet square.

And that;—first, because as the measure was to begin from the staff of the Standard, or *Eagle*; and from the precise spot wherein that was fixed; it would have been much more natural and easy, to have mentioned, at once, a distance, or measurement, that would have in reality, comprised about *four acres*;—unless there had been some particular reason, for deviating from such a plain mode of description.

In the next place, because a square of *two hundred feet* would not, one would think, be large enough, conveniently to contain a *Consul's* tent;—the *Sacellum*, or *Augurale*, which we are repeatedly informed stood near it;—and a *Parade*, or *Court* for the assembling of the Centurions, and other officers, of a great Consular army.

And in the last place; because we find at Richborough, that what evidently was the *Prætorium* there, was actually in due proportion, considering the smaller dimensions of that station, to a Consular Prætorium of *four hundred feet square*,† in a *Consular camp*.

* See the Military Antiquities, p. 42.

† See in the preceding sheets, p. 18. Pl. XX. fig. 1.

I must, therefore, venture to differ from that very curious, and most intelligent writer, *General Roy*, in this little point; and take the space for the Prætorium (rrrr) to have been 400 Roman feet square;—set off by a line of 200 feet, measured each way from the foot of the pitched standard (s);—after a space of only 200 feet square had been first determined, in the midst of it, as shewn by the dotted line.

The words of Polybius are,*

Τὸν κηδέντος ἀεὶ τόπον πρὸς Στρατοπεδείαν, — — — — —
 Τεθείσης δὲ τῆς σημαίας, ὅν μίλλουσι πηγνόναι ταυτην, ἀπομετρεῖται περίε τῆς
 σημαίας τετραγώνου τόπος, ὥστε πάσας τὰς πλευρὰς ἑκατὸν ἀπέχειν πόδας τῆς
 σημαίας, τὸ δὲ ἑμβάδων γίνεσθαι τετράπλευρον.

And they are thus translated by Casaubon;

Vexilla autem eo loci posito, ubi Prætorium sicut fixuri, — — — — —
Spatium quadratum circa ipsum vexillum sic metiuntur, ut ab eo latera
omnia centum distent pedes, ac jugerum quatuor fiat area.

And are thus translated by Hampton;

In this place (i. e. in the place marked out for the Consular tent) an
ensign is planted in the ground, and round it is measured a quadrangular
figure, every side of which is distant from the ensign an hundred feet; so
that the whole contents of it are equal to the space of four acres.

And the general conclusion has therefore been, that the whole area of the Prætorium was only 200 feet square.—But whoever will take the trouble to examine this account mathematically, will find that to be impossible. For,

A Roman *jugerum*, or *acre*, or *Πλέθρον*, is well known to have been, as much as one yoke of oxen would ear in a day; and to have contained, in length, 240 Roman feet, and in breadth 120.†—and in square superficies, 28800 square feet. And therefore four acres, or four times 28800 square feet, must have contained 115200 square feet.

But an area 200 feet square is so far from containing four acres, that it contains only 40000 feet;—that is not near two acres.

How then can this inconsistency be accounted for?—A little more accurate, and more cautious translation,—may perhaps render the whole account consistent. To effect which,

* Lib. vi. sec. 25.

† Plin. xviii. 5. Columella v. 1.

In the first place, it must be observed, that the most plain meaning of the word τὸ ἐμπεδόν; is not, *the area*;—but rather, *the walk round*.—For ἐμπεδόν, taken adverbially, is *pedestri itinere*.*

And in the next place,—that then the inference may fairly be, that the description of *Polybius* implies,—that a measure of 100 feet being first taken, from the foot of the standard each way, forming a square of 200 feet,—a *walk round* was then set off, containing in itself alone four acres.

And this will very nearly mathematically agree, both with the reduced proportions which we find at Richborough;—and with the idea of a *parade*, or *court*, belonging to a *Consular Prætorium*, of 400 feet square; or of about six acres in all.

For 400 Roman feet square, is equal to 160000 square feet:—and if from this we deduct the contents of an interior square area of 200 feet;—that is 40000 square feet;—there will be left, for the contents of the *walk round*, 120000 square feet;—which is no great matter more than 115200 square feet, or four Roman acres, exceeding only by one-sixth part of an acre.

We may, therefore, now perhaps venture, rather to translate the passage, still more *literally*; and in this manner.

The place always being first fixed upon for the PRÆTORIUM;—and the standard being pitched where they were about to set up THAT;—there was then measured round the standard a square space;—so that all ITS sides were an hundred feet distant from the standard;—and so that the walk round (this) was of four acres.

This space, then, (according to the conclusion, of its being 400 feet square,) being marked out, in the forming a *Consular camp of two legions, and auxiliaries*;—a line (aa) was drawn before the *Prætorium* and parallel to it, at the distance of 50 feet, running quite across the camp,—and within this boundary, on each side the *Prætorium*, were placed the tents of the twelve *Tribunes*, at equal distances;—six on the right, and six on the left; the spaces between serving for their horses, and attendants:—and beyond

* It is indeed true, that ἐμπεδόν, is sometimes used to signify the contents of an area:—but the more proper Greek word for that purpose, and to express *spatium geometricæ figuræ*, is χωρίον. See H. Stephens, Tom. IV. p. 668.

them, nearer to the two extremities, the tents of the twelve Præfects of the Allies, six on the right, and six on the left, were placed in the same manner;—having the whole of the soldiers' tents in their front.

Beyond this line, another (oo) was marked parallel to it, at the distance of 100 feet: and this latter interval formed the *Principia*, or the principal street, in the front of these officers' tents:—at the extremities of which street were the two *principal*, or side *gates* (gg).

This street was always kept clear of all incumbrances, by a constant guard;—was made quite level;—always kept smooth, and clean;—and served for mustering the whole army, previous to a march.*

There was then marked out, directly in the middle of the front of the *Prætorium*, and leading directly from it straight through the camp, a street, or way (vv), 50 feet broad.

And on each side this street were placed the *Equites*; the *Roman cavalry* (EEEE), fronting the street;—to each troop of whom (E) was allotted a space extending 100 feet along the way; and 100 feet also in breadth.

And close on each side of these were encamped the *Triarii* (tttt); with their backs to the cavalry; and fronting the two side streets (v2, v2). And to each troop, or *maniple*, of these, was allotted a space 100 feet in length; but, on account of the smallness of their number, only of 50 in breadth.

The lateral streets, like the way running through the middle of the camp, seem to have been 50 feet wide.

On the sides of these streets that were opposite to the *Triarii*, and fronting them, were placed the *Principes* (pppp);—to each troop or maniple of whom, on account of the superiority of their number to that of the *Triarii*, was allotted a space of 100 feet along the street, and of 100 feet broad.

On the right and left, outward from these, were placed the *Hastati* (hhhh);—whose number being the same as that of the *Principes*, they had a space of 100 feet square in like manner

* Allowing four square feet to a man, it would hold 56250 men; which is vastly more than a Consular army of 19200 men; and therefore would allow room for them in extended ranks; with more than eight square feet allowed to each man.

allotted for each of their *maniples*;—and fronted towards two other, more outward streets (n n); which completed the *five streets* properly belonging to the *Roman legion*.

On the opposite side of each of these two last streets, were placed the cavalry of the Allies (SE.SE.SE.SE), who seem to have been usually encamped in double *maniples*; and therefore at the same time that each of their divisions had, like the *Equites*, 100 feet along the way, each double *maniple* had 200 feet in depth.

Their number indeed was 900 to a legion;—but as 300 were drafted off for *Extraordinaries*, (who were placed in another situation in the camp,) it is plain that the remaining 600 would be placed, only 300 on each side the legionary troops;—and require only just twice the space on each side which the Roman *Equites* had;—and which we thus find to be exactly assigned to them.

In like manner, therefore, the infantry of the Allies, or *allied foot* of each legion, though 4200 in number, having one-fifth part, or 840, drafted from them for *Extraordinaries*, who were stationed in another part of the camp, would have only 1680 men to be situated on each side the legion respectively. Dividing these then like the horse, into five double *maniples*, there will be just 336 men for each double *maniple*, which is in the proportion of 168 for a single *maniple*.* A proportion exactly like that of the *Principes*, or *Hastati*, of the legionaries. For each of their *maniples* consisted of 120 men; and if to them we add their proportion of *Velites*, as attendants, it will make each of their *maniples*+ to amount to 168 men exactly.

These double *maniples* of the allied foot (SP.SP.SP.SP.SP.) were encamped fronting the vallum, or rampart.

And hence;—and because Polybius informs us there were *five streets* belonging to the *legion*, it has been concluded, that their double

| | | |
|---|--------|----------------------------|
| * | 4200 | Allied Foot. |
| | 840 | Extraordinaries. |
| | 2)3360 | Remain. |
| | 5)1680 | for each side of the Camp. |
| | 2)336 | for each double Maniple. |
| | 168 | for a single Maniple. |

+ There were in all 1200 *Velites*. If then we divide these into three equal parts, for attendants upon the *Triarii*, *Principes*, and *Hastati*; each respective body will have 400 belonging to them; and each of the *maniples* 40. But if, instead of allotting so many to the

maniples were placed immediately at the back of the *double maniples* of *allied horse*, without any street between them:—and *General Roy* has adopted that idea. But here again I find myself compelled to form a different conclusion.

First,—because, in that case, the soldiers of the double maniples must have found a very inconvenient access to the further and more interior part of each *maniple*.

In the next place,—because, as we find the distribution of the *allies* in the number contained in their double maniples, so exactly agreed with the numbers of the legionaries in their distribution, we may rather conclude they agreed with them in the precise mode of their encampment, in all other respects.

And lastly,—because the words of Polybius really do not imply that there were *only five streets*, in a camp. For they are,

Ἀποτελεσθεῖσιν δὲ τῶν ἀπασῶν πέντε ὁδοῶν,*

which *Casaubon* indeed translates, in a sort of circuitous manner, *ubi jam sunt absolute intercurrentes viæ (quinque omnino hæ sunt)*—as if there were only five:—but the more plain translation surely is, simply,—*all the five ways being finished*;—which only implies, *all the five ways, belonging properly to the legion itself, being finished*;—and this even rather leads us to conclude that there were also other *ways*, or streets belonging to the *allied troops*;—or at least leaves us at liberty to do so.

We may therefore, (to render the similarity of their encampment to that of the legion, in like manner as that of their precise number in each double maniple the more complete,) venture to conclude, that in exact imitation of the *legionary* encampment, there was a

Triarii, we divide the *Velites* in proportion to the number in each of the legionary bodies; then the *Triarii* will have 240 belonging to them; and the *Principes* and *Hastati* 480 belonging to them: and of course each of their maniples 48;—which number added to 120, will make 168.

$$\begin{array}{r} 5 \overline{) 1200} \text{ Velites.} \\ \underline{240} \text{ the portion belonging to the Triarii.} \\ 2 \\ \underline{10) 480} \text{ the portion belonging to either Principes or Hastati.} \\ \underline{48} \text{ the portion belonging to a Maniple.} \end{array}$$

* Lib. vi. sec. 28.

way of 50 feet in breadth between the *allied horse* and the *allied foot*, both on the right hand and on the left of the legionary camp, at (n) and (n).

Between the double *maniples* of the allied foot, and the *vallum*, or rampart, was left a space of 200 feet:—both for the advantage of protecting them from the missile weapons of an enemy; which in those days could hardly, with any great effect, fly so far;—and also for obtaining the advantage of a space, for the easy marching of troops, to the ramparts;—and also for the stowage of cattle, and forage.

It has been carefully remarked, by *General Roy*, that neither *Polybius*, nor other writers, give us any account how, or where, the 1200 *Velites*, or *light armed troops*, were disposed of in the camp. We cannot but therefore fairly conclude, that they were indeed never considered as any properly distinct body;—but only as attendant upon, and as incorporated with the rest. Their armature, and every circumstance that we are made acquainted with, as belonging to them, seems to bespeak it. They appear indeed to have been somewhat like what, in long subsequent *Norman* times, would have been called Esquires attending upon Knights. They therefore attended around the more regular troops of the *Triarii*, *Principes*, and *Hastati*, in battle; in due proportionate numbers;—and in the same due proportionate numbers seem to have attended them in camp;—and hence the silence of *Polybius*, and of other authors, as to any part of the camp allotted to them.

And when we come to examine the precise contents of the space allotted to *each maniple*, we shall find, that there was indeed so much more than room for these attendant *Velites*, that there was even room for Carpenters who might be employed to set up the tents; and for other servants;—exactly in conformity to the idea given us of such assistants by *Josephus*.

Beyond this encampment of the *first legion*, and of its allies, a street of 50 feet in breadth (bb) was drawn quite across the whole, which was called *Quintana*; either on account of its traversing the stations of the five legionary bodies, the *Equites*; *Triarii*; *Principes*; *Hastati*; and *Velites*;—or else because it traversed the five encamped bodies of *Equites*; *Triarii*; *Principes*; *Hastati*; and *Socii*.

Beyond this street, the second legion, and its allies were encamped, exactly in the same manner as the first.

And at the extremity, and on the two sides of the whole, a space was left 200 Roman feet broad, between the tents and the *vallum*;—for the same purposes that have been already mentioned, with regard to the other part of the camp;—and also for the holding of cattle, and forage, taken from the enemy, and other plunder.

Let us now return to the *Prætorium*; and to the parts behind it, towards the *Prætorian gate*.

And here, in the first place, we are given by *Polybius* to understand,—that, close behind the *Prætorium*, (considering its front to be that opposite to the *Decuman gate*, as the fronts of the *Tribune's* tents were opposite to it) there was a great street (mm) 100 feet broad, running quite across the whole camp. And that opposite to the middle of the *Prætorium*, another street (xx) 50 feet broad, was carried, in a direct line, straight from thence to that which we have considered as the *Prætorian gate* (P):—but of the length of that street, we have no other information, than what may be deduced from our being told that the camp, when completed, was of a *square form*, and *equilateral*.*

We may then gather from a careful consideration of the substance of the rest of the account given us by *Polybius*; that two spaces, which were situated on each side the *Prætorium*, behind the tents of the *Tribunes*, were destined, the one (F) for a *Forum*;—or place where all public business was to be transacted, and justice to be administered,—(not a place, according to the vulgar word *market*, for mere shambles):—and the other, (T), on the other side of the *Prætorium*, for the place where the *financial* part of the *Quæstor's* business was to be transacted;—and where was the *Ταμείζ*, or *Ταμείον*; which we should perhaps, in these modern days, call the *Treasury*, and the *Pay-office*.

As therefore the *Quæstor's* office consisted not merely in receiving the money for the payment of the army; and in paying the soldiers;—but also in taking care of the stores; and even in the

* The precise words of *Polybius* are, τάτων δὲ ἕως ἔχοντων, τὸ μὲν σύμπαν σχῆμα γίνεται τῆς στρατοπεδείας τετραγώνου ἰσόπλευρον. Lib. vi. sec. 29.

distribution of wheat to the men, and barley to the horses;—and in receiving, and distributing, the forage, and the cattle;—and in receiving the booty taken from the enemy, and in selling it;—all which articles we may be assured never would be brought the whole way through the streets of the camp, to this place near the Prætorium; we are led plainly to conclude, that he must also have had some other usual *station* for the execution of his office, besides this;—in which other, he might transact this latter part of his business:—and for such purpose, no place surely could be so proper, as somewhere in the void space, near to the *Decuman gate*; which on that account, probably, as well as because of the cattle, and these *bulky* articles properly under the Quæstor's care, being brought in at this great and wide gate, might sometimes be called the *Quæstorian gate*.—And this conclusion is consistent with what we find in the passages that have already been cited from *Livy*.*

The words of *Polybius* seem evidently to confine the use of the space allotted to the *Quæstor*, near the *Prætorium*, merely to the execution of his office as *Paymaster*, and *Treasurer*. For, in describing the use of it, they are

Τῶ τε ταμίῳ, καὶ τῆς αὐτοῦ χρηματίας.

for the *Quæstor*, and such things as appertain to the discharge of his office.†

On the side of the great street (mm) running behind the *Prætorium*, and behind these two spaces; and on each side the street (xx) that led from the *Prætorium* to the gate; and fronting the *Prætorium*, the *Forum*, and the *Quæstorium*; were encamped that part of the cavalry of the Allies (EX. EX. EX. EX. EX. EX.) that had been drafted as *Extraordinaries*. Whose number we are told was 300 from each body of the Allies belonging to the two legions.

But a part of these 300 was again still further drafted, to form the *Ablecti*, or *select horse*, for the Consul's guard; and these latter were encamped differently;—those from the one 300, (ab.ab.ab.ab.) being

* Page 15.

† In another passage, speaking of the situation of the *Extraordinaries*, opposite to this station of the *Quæstor*'s office, the words of *Polybius* are,

βλέποντες οἱ μὲν ἐπὶ τῆς ταμείῳ παρασκευάς. Lib. xxvi. sec. 11.

placed on the side of the Forum (F), and fronting towards it;— and those from the other 300, (ab.ab.ab.ab.) being placed on the side of the *Quæstorium* (T), and fronting it.

We are not told what the precise number of the *Ablecti* were;— but if we take them to have been 120 from each body of the *Extraordinaries*; (which is likely enough, because that is just four *maniples*, or troops of horse; and is equal to the number of Legionaries in one whole maniple or troop of Legionary foot, either *Principes*, or *Hastati*,) then the encampment of the *Ablecti* horse will be found, in a manner remarkably coincident with all other circumstances, to have been just *four maniples* on each side;—that is *exactly the breadth of the Prætorium*, allowing them precisely the same measures of space for their encampment, that all the cavalry uniformly had in every other part; and allowing precisely the same number of horse, that is 30, for each *maniple*. And the encampment of the residue of the *Extraordinary* horse, in the same manner, along the great street (mm) behind the Prætorium, will be that of just six *maniples* (or 180 horse) on each side; reaching only just far enough to leave two spaces at the corners of the camp, precisely such as are spoken of by *Polybius*, as destined for the reception of strangers.

Beyond the *Ablecti*, on each side, and nearer the ramparts, were placed the *Evocati* (EV.EV.EV.EV.), or volunteer horse;—for whom, we may very fairly conclude, a space equal to that of the *Ablecti*, and disposed of in the same manner, would be fully sufficient.

Beyond these, and still nearer to the ramparts on each side, we are told were placed the *Evocati*, volunteer foot (e.e.e.e.).

And still beyond these, with their front towards the rampart, were encamped the *Selecti* (f.f.f.f.), or that part of the *Extraordinary* foot, who formed the Consul's guard.

We are not told precisely what their number was, any more than what the number of the *Ablecti*, or guard of horse was. But as we are informed, that the whole number of *Extraordinary* Foot chosen from the two Legions, was one-fifth part, or 1680 men; (that is 840 from each Legion;) we may here very fairly conclude, that their number was 336 on each side; bearing just the same proportion to

the whole number of *Extraordinary foot*; as the number of the *Ablecti* drafted did to that of the *Extraordinary horse*. And if we conceive them to be encamped, (like the *Triarii* and *their Velites*, in four *half maniples* of 84 men each; their encampment again, like that of the *Ablecti*, will reach just 400 feet:—that is the exact breadth of the *Prætorium*:—and the residue of the *Extraordinary foot*, (the remaining 504 of each Legion) will form six *half maniples*; reaching exactly to the same extent as the *Extraordinary horse*; behind whom we are told they were placed, with their front to the rampart.

As the number of *Contubernales*, and of volunteers or *Evocati*, attending a Consular camp, must ever have been uncertain; depending merely on the Consul's permission;—it may be seen, that by placing the *Selecti* foot (ffff) as they are placed in this plan; or else by making their line to range exactly with that of (sp. sp. sp. sp.), the *Allied* foot; the space allotted for such volunteers, or *Evocati*, might be contracted, or enlarged at pleasure.

As to the *Legates*; who were very few indeed, and who at first seem to have been persons deputed by the *Senate* to negotiate with foreign powers, with whom the Romans were at war, or to adjust differences between foreign states;—and afterwards were senatorial persons, intrusted by the Consul to command great detachments of the army;—they very probably might be placed, as General Roy supposes, in the *Forum*, near the *Prætorium*;—or even have tents on the *Prætorium* itself. With regard to this there is some uncertainty;—but for every thing else, we have the plain intimations, and guidance, of *Polybius* himself, who was an eye witness of the whole exact order of *Scipio's* camp.

Between the *Selecti*, or *Extraordinary foot*, and the rampart, we are informed there was again a void space left of 200 feet; for the same kind of purposes as in the other parts all around the camp.

And now surely we have another obvious proof of the propriety of venturing to depart from *General Roy's* plan; and of making the space for the *Prætorium* *four hundred feet square*.—For by doing thus, we not only still find the whole camp *completely square*; but we find every part of it completely, and fully occupied, exactly in consistency with the measures, and description given by *Polybius*:

whereas, when we attentively consider General Roy's plan, we cannot but perceive, that there was too much space by far assigned therein both for the *Selecti*, or foot guards; and also for the *Extraordinary foot*, upon any computation whatever, in proportion to the accommodation of the rest of the army;—and too little space for the *Ablecti*, and for the *Extraordinary horse*; (divide them how you will, and place them how you will). And that there was far too little space for *any Forum*.—But by making the *Prætorium* four hundred feet square, all comes out in due and just proportion. And the *Prætorium* stands, (as we find that actually did at Richborough,) much nearer to the *Prætorian gate* than to the *Decuman*.

The length of the street (xx) leading from the *Prætorium* to the *Prætorian gate*, is left by Polybius unascertained;—and so also is the extent of the rampart (or vallum) of the camp.—General Roy supposed the length of the street to be 250 feet;* but did so, (as he confesses) merely for the sake of making the camp exactly square; which Polybius certainly says it was.—And he therefore supposes the whole side of the camp to be 2150 Roman feet, or 2077½ English feet, in extent. But if we take the length of this street to have been only 150 feet long; (answering exactly to the breadth of the space required for the *Extraordinaries*, both horse and foot;) then we shall still have the whole camp exactly square, according to the ideas here adopted; only the extent of any one of its sides will be 2250 Roman feet, or about 2173 English feet:—and we shall have two additional streets (nn) for the convenience of the Allies, exactly similar to those five which were for the convenience of the Legions.

The perfectly exact squareness of a Roman camp, according to this interpretation of the words of *Polybius*, will be obvious, even from the slightest detail of the particular measures of the several parts.

For the breadth of the camp, along the *Principia*, or principal street, from one side gate to the other, will consist of

* *Military Antiquities*, p. 44.

| | Feet. |
|---|-------|
| The breadth of the space left next the Vallum - | 200 |
| Two maniples of <i>Allied foot</i> - - - - | 200 |
| A street - - - - - | 50 |
| Two maniples of Allied horse - - - - | 200 |
| A street - - - - - | 50 |
| A maniple of <i>Hastati</i> , and a maniple of <i>Principes</i> | 200 |
| A street - - - - - | 50 |
| A maniple of <i>Triarii</i> , and a maniple of <i>Equites</i> - | 150 |
| The great Decuman street, in the midst - - | 50 |
| A maniple of <i>Equites</i> , and a maniple of <i>Triarii</i> | 150 |
| A street - - - - - | 50 |
| A maniple of <i>Principes</i> , and a maniple of <i>Hastati</i> | 200 |
| A street - - - - - | 50 |
| Two maniples of <i>Allied horse</i> - - - - | 200 |
| A street - - - - - | 50 |
| Two maniples of <i>Allied foot</i> - - - - | 200 |
| The breadth of the space left next the Vallum - | 200 |

2250

and the length of the Camp, from the *Decuman*, to the *Prætorian* gate, will consist of,

| | Feet. |
|---|-------|
| The breadth of the space left next the Vallum - | 200 |
| Five maniples of Roman <i>Equites</i> - - - - | 500 |
| The street <i>Quintana</i> - - - - - | 50 |
| Five maniples of Roman <i>Equites</i> - - - - | 500 |
| The <i>Principia</i> , or principal street - - - - | 100 |
| The <i>Tribunes'</i> allotment - - - - - | 50 |
| The <i>Prætorium</i> - - - - - | 400 |
| The great street behind the <i>Prætorium</i> - - | 100 |
| A maniple of <i>Extraordinary horse</i> , and half a maniple of <i>Extraordinary foot</i> - - - - | 150 |
| The breadth of the space left next the vallum - | 200 |

2250

And it is most remarkable, and no small confirmation of the propriety of adopting all these ideas precisely; that these dimensions for the sides of a Consular camp, agree better with the curious

Remain of the camp at *Kirkboddie*, that has been already mentioned, (and which General Roy so justly concludes to have been designed to hold a single Legion, with its Allies,) than his own dimensions assigned for a Consular camp:—for it was 2280 feet in length, and 1080 feet in breadth.*

It may now well deserve our attention, how a single *maniple* could have its tents placed?

We are positively told, that the space allotted to one *maniple* either of the *Hastati*, or *Principes*, was 100 feet square;—and that each tent containing 8 men, was in all 24 or 25 feet, by 12; consisting of a tent 10 feet square, with an allowance of 1 foot for pitching it, and with 5 feet for arms, and 10 feet for bat horses.

As then the *maniple* consisted of 120 Legionaries; 15 tents would contain them all, as common men. But six of them were officers; and of those six, two were *Centurions*, and deemed officers of such considerable rank, that the first chosen of the two, even had a seat in the council of war; and their tents (as we are expressly told by Polybius,†) stood always, by way of distinction, on each side, in the front of the whole band.

The whole *maniple*, therefore, (allowing a separate tent to each *Centurion*; and one tent, for the sole use of the four subaltern officers,) may be concluded to have contained 18 tents for the Le-

* The square area of a Roman camp, according to General Roy's dimensions of its sides, which he computed to be 2150 Roman feet, or about $2077\frac{1}{3}$ English feet, will be 4622500 Roman feet, or very nearly 4314621 square English feet:—and the half, therefore, 2311250 Roman square feet, or $2157310\frac{1}{2}$ English square feet. But, according to the conclusions formed in these pages, its sides will be each just 2250 Roman feet, or about 2173 English feet; and its square area 5062500 Roman square feet, or about 4721929 English square feet:—and the half thereof, 2531250 Roman, or 2360964 $\frac{1}{2}$ English square feet.

Now the camp at *Kirkboddie* is, according to General Roy's measures, 2280 feet, by 1080. Its area, therefore, is plainly 2362400 square English feet. And this unquestionably agrees better with 2360964 $\frac{1}{2}$, the half of a Consular camp of 2173 feet square; than with 2157310 $\frac{1}{2}$ square feet, the half of $2077\frac{1}{3}$ feet square.

Or, if we take the measures in Roman feet, according to which the sides of the camp at *Kirkboddie* will be very nearly 2360, by 1118. Then its area, 2638480 Roman square feet, agrees better with 2531250, the half of a Consular camp of 2250 Roman feet square, than with 2311250, the half of 2150 Roman feet square.

† Lib. vi. sec. 28.

Fig. 3.

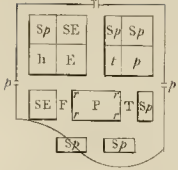


Fig 5.

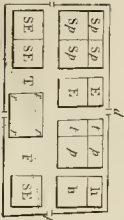


Fig. 4. PL. XXVIII

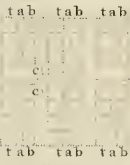
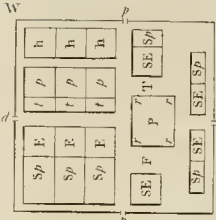
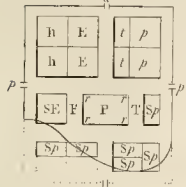


Fig. 6.

Fig. 2.

Fig. 7.

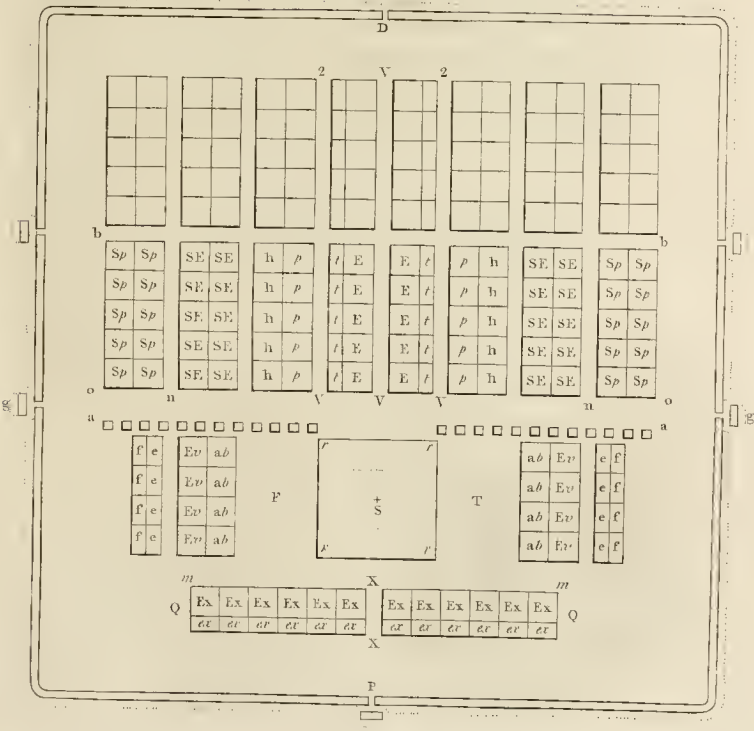
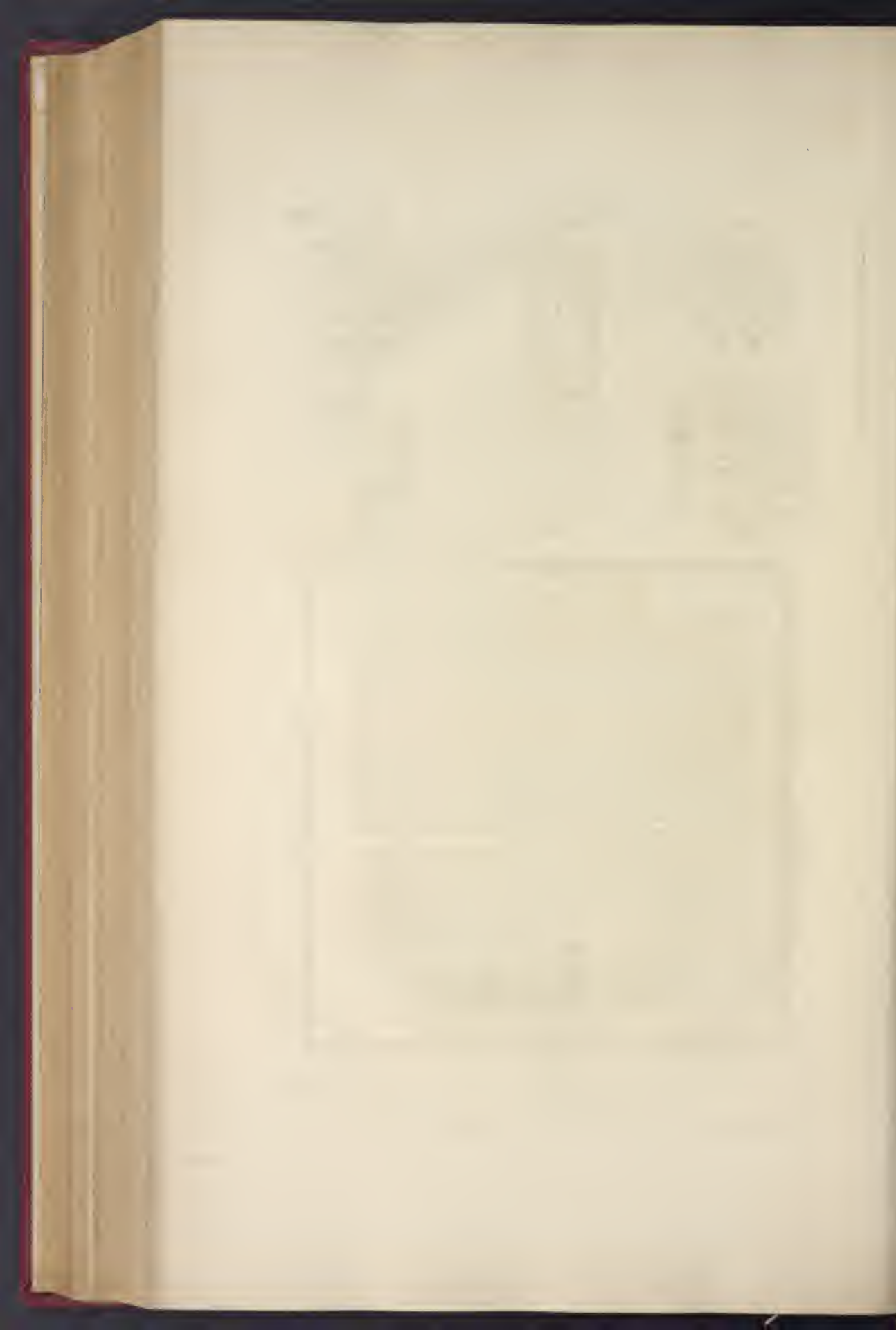


Fig. 1.

S
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gionaries ; even with spare room, for 6 carpenters, or servants, in one of them.

And if the proportion of *Velites* to each manipule was, as we have had reason to conclude, 48 men ;—then 6 tents more would contain them also :—and 24 tents would hold the whole completely. And 24 such tents, we shall find, might be nicely adapted, in a very plain manner,* to occupy a space 100 feet square :—and to leave also some space for slaves, and attendants, of whom Polybius tells us there were several ;—and to whom an oath was always administered, by the Tribunes, *not to steal*.

Three rows of such tents, of eight in each row, (even if their depth was 25 feet instead of 24,) would, in an area 100 feet square, leave two walks, or passages, 12 feet broad, between each row of tents ;—and 8 tents in a row, each of 12 feet in breadth, taking up only 96 feet, would leave a passage between the two middle tents of 4 feet. Which walks, and passages, appear to have been quite sufficient for necessary convenience ; and even for little offices to be performed by the slaves ; some of whom might probably sleep occasionally in the divisions allotted to the arms, and bat horses, of each tent.

A plan, fig. 2. Pl. ^{xxviii}/₄, will better explain the whole idea :—where the two *Centurions'* tents are marked on each side, at (cc) ; and the three divisions of each tent ;—one for the tent itself,—and one for a place for arms,—and another for bat horses,—are marked by lines in exact proportion, as shewn by the letters (t. a. b.).

To complete the account of the Roman order of encamping, it should perhaps be added ; that the tent of each Tribune was, for state, constantly attended by a guard of four soldiers ;—placed two

* I have here again ventured, in the ideas I have formed, to depart from those given, from *Schellius*, and from his own apprehensions, in *General Roy's* curious plates ; † because, according to those, it does not to me appear quite satisfactorily, how each tent could possibly be constructed, of the dimensions, and with the annexed spaces, which General Roy himself has described, † from the fragment of *Hyginus*, of 10 feet square for the tent ; with 1 foot on the sides for pitching ;—of 5 feet added for arms, and accoutrements : and then of 9 feet added for bat horses. How to find room for those additional spaces, to each tent, in those plans, I cannot perceive, computing on the same scale with the 100 feet square assigned for the whole.

‡ Pl. XLV. fig. 3 and 4.

|| *Military Antiquities*, p. 194.

before his tent, and two behind it;*—and by two or three others to pitch it, and to make the ground level round it; and to fence in his baggage;—all of whom were taken in turn from the maniples of *Principes*, and *Hastati*.

And that, in like manner, from the same two bodies of troops, were taken in turn, certain soldiers to level, and cleanse the *principal street*, and to keep it clear of all annoyances, as a sort of Parade. And that one maniple of the *Triarii*, constantly attended, in regular turn, round the Consul's tent.

That the entrenchments, on each side the camp, were thrown up by the *Allies*:—and those in the front, and rear, by the *Legionaries*.

And that the *Præfects* had just the same attendance from,—and performed the same offices, amongst the *Allies*,—as the *Tribunes* did amongst the *Legionaries*.

For orders; the *Centurions* attended each morning at the tents of the *Tribunes*;—and the *Tribunes* themselves, at the *Prætorium*.

The entrenchments were constantly watched, and guarded, by the *Velites*;—ten of whom were also placed at every gate;—and the care of *going the rounds*, was entrusted to the *Equites*, or cavalry;—four of whom, chosen by turns, performed that office; one at every watch; on the sounding of a trumpet at the tent of the first Centurion of the *Triarii*. And each man going the round, took some of his friends with him, to bear testimony to the truth of his report made next morning to the *Tribunes*.

The order of marching, and of setting out on a march, has already been described, as given by *Josephus*:†—and Polybius tells us, that

* This was the regular kind of Roman guard. And thus we find Herod, in imitation of Roman customs, delivering *Peter* to four *quaternions* of soldiers, to keep him; (that is, to guard him *in turn*;)—and between two of these soldiers, we find he slept; whilst the other two, we may understand, were to guard the door. Acts, chap. xii. ver. 4. 6.

† We find *Josephus* expressing uncommon admiration at the order and arrangement of the *Roman armies* (lib. iii. cap. 5.); which may perhaps, *from him*, appear the more extraordinary; because he was so perfectly well acquainted, with the description of the exquisite arrangement of the camp of *Israel*, and of the order of the marching of the hosts of the Twelve Tribes, as described in the book of *Numbers* (chap. 2, 3, 4. 10.): a truly sublime pattern of regular discipline.

But it ought to be considered, that such observance of military order, amongst the Jews,

some time before the army could arrive at the spot intended for its encampment, the centre, of the space designed for the *Prætorium*, was distinguished by a *White Standard*;—whilst the front of that

had become totally disused in his time;—as appears both from the book of *Maccabees*; and from his own History;—and was also unknown to the Greeks, and to all the neighbouring nations.

Polybius expressly tells us, at the end of his account of the Roman mode of encamping, that the *Greeks* had no regular method;—but when they encamped, considered merely the natural strength of the place chosen;—and accommodated their disposition of themselves to it;—and *did this*, in so confused a manner, that no soldier ever knew, with certainty, either his own place in the camp, or that of the body to which he belonged.

It is curious, to reflect on *second causes*, upon this occasion: and in considering the progress of the various *Great Powers* that have been on earth, to discern,—that the improvement, of the construction of *rapid armed Chariots of Iron*, seems to have produced the *first Assyrian Kingdom*;—the improvement, of the mode of *Fortification*, by means of stronger stone walls, and towers; and of the mode of *Attack*, by means of *blockading Cities*, with *vast hosts*; seems to have produced the *Babylonian Empire*:—the improvement, of forming bodies of *Cavalry*; seems to have produced the *Persian*;—the improvement, of forming a *Phalanx*, of heavy armed troops, seems to have produced the *Macedonian*. This invention of *Castrametation*, and strict *Discipline*, the Roman;—Raging zeal, and the *Sabre*,—the *Saracen*;—and the invention of *Cannon*, and *Gunpowder*, the *Turkish Empire*.

They were all *instruments* in the hands of the MOST HIGH,—And *that*, which we are ever too ready to consider as *mere invention*;—awakened, as it appeared to the common eye, only in the minds of one or two obscure men, whose names we are hardly acquainted with; seems to have been, indeed, the main hidden spring, that did put in motion all these so *vast Powers*, that have terribly produced, from generation to generation, such tremendous, and such different events, in successive periods, on the face of the whole earth.

Was not then *that invention* a sort of *real Inspiration*?—And are we not led to conclude certainly that it was so;—even from what is expressly said in Holy Writ, concerning the exquisite skill of *Bezalel*,* and *Aholiab*?

Considering the dignified sublimity, and accuracy of the description, in the Holy Scriptures, of that first mode of encampment, which really was according to a *Divine Command*; it is astonishing how hastily and lightly Josephus abridges,† and passes the whole over in his *Antiquities*; though he adds some interesting circumstances.—And it surely does, therefore, the rather deserve now that we should bestow some further attention, in order to compare the account conveyed to us, in this interesting piece of Sacred History, with that of a *Roman camp*, so greatly admired by Josephus:—And that we should reflect a little, how the whole would appear, when merely put in words somewhat similar to such plain ones, as probably would have been used by Polybius.

In the midst, was placed the Tent, or Tabernacle, of THE GREAT GOD OF ISRAEL, —THE LORD OF HOSTS,—consisting of two apartments of the most perfect, and

* Exodus, chap. xxxi. ver. 2 to 7.

† In his *Jewish Antiquities*, lib. iii. cap. 12. sec. 5.

space,—the line for the Tribunes,—and the line bounding the principal street,—were distinguished by three *purple standards*;—one

beautiful proportions;—the one a cube; the other a double cube;†||—the measure of whose height, and breadth, was 10 cubits,—or 15 feet.—All the boards whereof this Tabernacle was composed, were overlaid with pure gold;*—and the hangings were richly embroidered with blue, and purple,‡ and scarlet.

Around it a space, or court, was measured out, of 100 cubits, by 50;—or of 150 feet, by 75;‡—surrounded with pillars of brass, having silver fillets, and hooks; and rich embroidered curtains hung between them.

Beyond this a certain space was left, out of reverential awe;—and then were pitched the tents of MOSES, their leader; and of AARON, their High Priest; and those of the Priests his sons: all towards the East; and before the door of the Tabernacle.§

Behind the Tabernacle, about the same distance, to the West, were pitched the tents of 7500 of the Levites, called from their ancestor, *Gershomites*;—who were the persons appointed to take care of, and to carry its Coverings, and Hangings.||

On the North side, in like manner, were the tents of 6200 of the Levites called *Merarites*, who were, on journies, to carry the Boards of the Tabernacle, and the Pillars of the Court;¶ and to set them up at the appointed place.

On the South side; were the tents of 3600 Levites, called *Kohalaites*; who were to carry the Sacred Vessels;—and THE ARK OF THE COVENANT.**

Again; at a due reverential distance, beyond these, were pitched the tents of all the twelve tribes.

On the East side;—in three separate divisions,—the tribe of *Judah* as chief, with the tribes of *Issachar*,—and *Zebulun*.††

On the West;—in like manner, the tribe of *Ephraim* as chief;—with the tribes of *Manasseh*;—and *Benjamin*.‡‡

On the North;—the tribe of *Dan*, as chief; with the tribes of *Asher*;—and *Naphtali*.§§

And on the South;—deemed the more honourable side of the two,—the tribe of *Reuben*, as chief;—with the tribes of *Simeon*;—and *Gad*.|||

In the four corners of the camp, therefore, we may perceive were left great square spaces;—for the stowage of their cattle;—for markets;—and for places of exercise.

†|| Exodus, chap. xxvi. ver. 16, 18, 22, 23. The length, or height, of each board was 10 cubits, or 15 feet.—And twenty boards of 1½ cubit, or 2 feet 3 inches in breadth, would reach just 45 feet in length;—while six boards at the end, with the two coupling boards set *aslant on the outside* at the corners, would extend just about 15 feet in breadth, between side and side. So that on the whole, there would be exactly a *double cube* of 15 feet, for the *Holy Place*;—and a *cube* of 15, for the *Holy of Holies*, where the *Ark* was placed.

* Exodus, chap. xxvi. ver. 29.

† Ibid. ver. 1.

‡ Ibid. chap. xxvii. ver. 9, 10, 16, 17, 18.

§ Numbers, chap. iii. ver. 35.

|| Numbers, chap. iii. ver. 22, 23, 25, 26.

¶ Ibid. ver. 34, 35, 36, 37.

** Ibid. ver. 28, 29, 31.

†† Ibid. chap. ii. ver. 3, 5, 7.

‡‡ Ibid. ver. 18, 20, 22.

§§ Ibid. ver. 25, 27, 29.

||| Ibid. ver. 10, 12, 14.

set up in the middle part of each line ;—and that the boundaries of every intended street were distinguished clearly, by pikes stuck upright in the ground:—insomuch that no single *maniple* could hesitate a moment where to go.

Josephus tells us; ¶§¶ that roads, or streets, were formed through the midst of all the tents, in the several divisions:—so that each was like a well appointed forum (or *bazar*); with all sorts of artificers in their shops, and every thing ready for sale;—and that the whole camp resembled a city; sometimes moveable; and sometimes fixed.

He adds, that the Priests had trumpets, made of silver; a cubit, or 1½ foot in length;—composed of a narrow tube, with a wide mouth;—which were made use of to give the signals for marching.

When the first signal was sounded,—by the blowing of one trumpet,—Aaron, and the Priests went and covered up the Ark, and the Holy Vessels, and Altars :—and the Princes assembled.* And preparations were made.

And when an alarm was sounded by the two trumpets;†—the tribes that had been encamped on the East side set forwards;—the Standard of the camp of *Judah* marching first; ‡ and the tribes of *Issachur*, and *Zebulun*, following.

Then the Tabernacle was taken down;—and the *Gershonites* marched; bearing the Curtains, and coverings of the Tabernacle;—and the *Merarites*; bearing the Boards, and Pillars §—both having waggons for the purpose.

When the alarm was sounded the *second* time—the tribes encamped on the South side, began their journey: the Standard of the tribe of *Reuben* going first;—and the tribes of *Simeon*, and *Gad*, following.||

And then the *Kohathites* followed;—bearing, on their shoulders, the Altars; and Holy Vessels; all covered up in fine blue cloths ¶ and in purplecloths.**

Then marched the tribes encamped on the West side;—the Standard of the tribe of *Ephraim* leading;—and the tribes of *Manasseh*, and *Benjamin*, following.††

And last of all came those encamped on the North side;—the Standard of the tribe of *Dan* preceding the rest;—and the tribes of *Asher*, and of *Naphthali*, following.‡‡

And it is most obvious from the whole tenor of their history, that they all had waggons: §§—and oxen;—and beasts of burden;—and much cattle.||||

Such was the arrangement, and order of the Camp of ISRAEL,—which the Prophet *Balaam* beheld from the summits ¶¶ of the mountains *Pisgah* and *Peor*;—and which drew from him, *** with admiration, justly superior to that expressed by *Josephus*, the sublime exclamation,

How goodly are thy Tents, O JACOB! and thy Tabernacles, O ISRAEL!

Some faint idea of the whole is endeavoured to be represented, in a plan, upon a very

¶§¶ In his *Jewish Antiquities*, lib. iii. cap. 12. sec. 5.

* Numbers, chap. x. ver. 4. † Ibid. ver. 5. ‡ Ibid. ver. 14.

§ Ibid. ver. 17. || Ibid. ver. 18. ¶ Ibid. ver. 21. Chap. iv. ver. 7, 9, 11.

** Ibid. chap. iv. ver. 13 †† Ibid. chap. x. ver. 22. ‡‡ Ibid. ver. 25.

§§ Ibid. chap. vii. ver. 3. ||| Ibid. chap. xx. ver. 4.

¶¶ Ibid. chap. xxiii. ver. 9, 14. *** Ibid. chap. xxiv. ver. 5.

We are further informed, by *Polybius*; that when *two Consular armies*,—or four legions, with their allied troops, (or *Socii*), were encamped together, there were two methods of doing it; according to the nature of the ground.—The one; that of placing two such Camps, as have been described, close together, within one entrenchment;—and joining in that part where the Extraordinaries are placed; as is shewn in a slight sketch, on a small scale, fig. 1. Pl. $\frac{\text{xxviii}}{5}$;—the other, that of placing the two Camps separate; in different entrenchments;—and then placing a *Prætorium*, a *Forum*, and a *Quæstorium*, in the middle space between both camps;—in a manner that, as it appears to me, may be explained by Pl. $\frac{\text{xxviii}}{5}$, fig. 2.

In the first case;—it may easily be perceived that the area of the Camp was just the double of that of a *Consular camp*;—and the surrounding rampart was more extensive by one half than that of a *Consular camp*.*

In the latter case;—each Camp was in all respects the same as before;—but there was an additional construction of common public offices, (besides their separate ones,) for mutual convenience, placed between them.

The account of this mode of encampment, given by *Polybius*, is not so full and clear as some other parts of his descriptions are;—but due attention will render it satisfactorily intelligible. The words are,

small scale, at fig. 3. Pl. $\frac{\text{xxviii}}{5}$;—where the *Tribes*, and the three orders of the *Levites*, are marked by their initial letters, placed in each *central void space*;—where *streets* are left, such as *Josephus* describes;—and where each little square (like those in a Roman camp) is supposed to contain some certain number of tents:—whilst it is very obvious, that by simply enlarging the proportions of each square uniformly throughout, the plan might be adapted to any increasing number of the host whatever.

* The words of *Polybius* (lib. vi. sec. 30.) are, τὸ δὲ χωρίον διπλάσιον τῆ πρόθεν, τὴν δὲ περίμετρον ἡμίβλιον.—Which may be translated literally,—and the area was double the former, but the perimeter by one half of the whole larger.

And it ought not to be passed by unnoticed; that here *Polybius* uses the word τὸ χωρίον, to express the *area*, with the utmost propriety: and not the word τὸ ἐμβαδόν, which he had used before, in speaking of the *extent* of the *Prætorium*;—and that this is a strong confirmation of the truth of what has been concluded, in p. 83, concerning his meaning;—and that, by the word τὸ ἐμβαδόν, he intended to describe, not the *whole area*, but merely the *parade*:—the surrounding platform;—or walk round the *two hundred feet square* of the *Prætorium*.

Fig. 1.

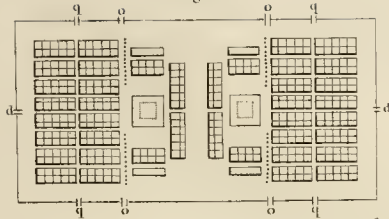


Fig. 2.

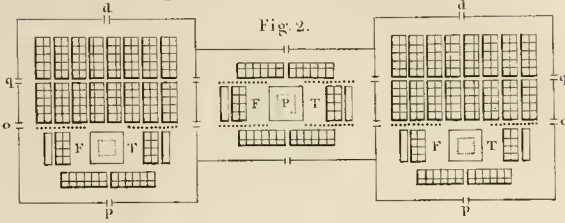
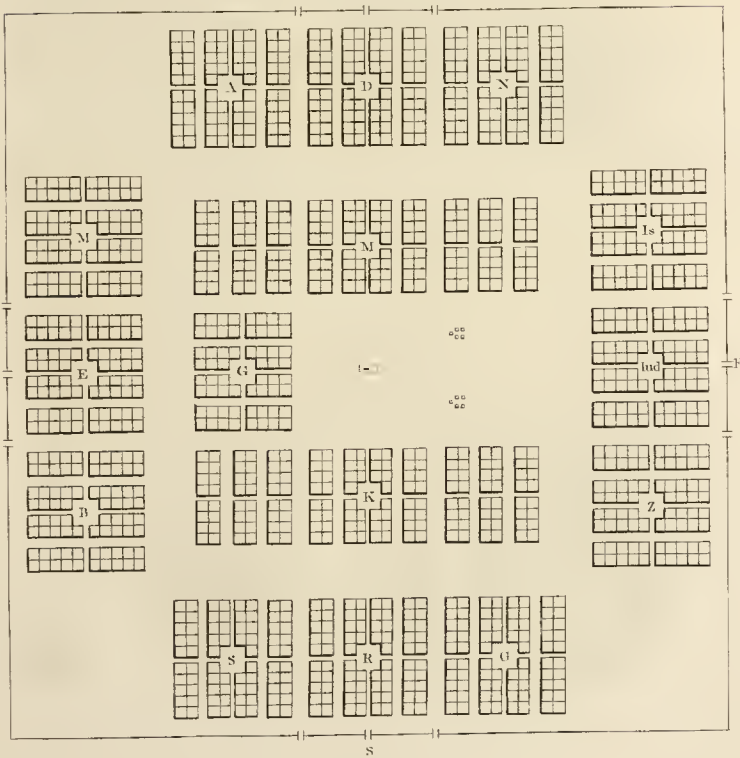
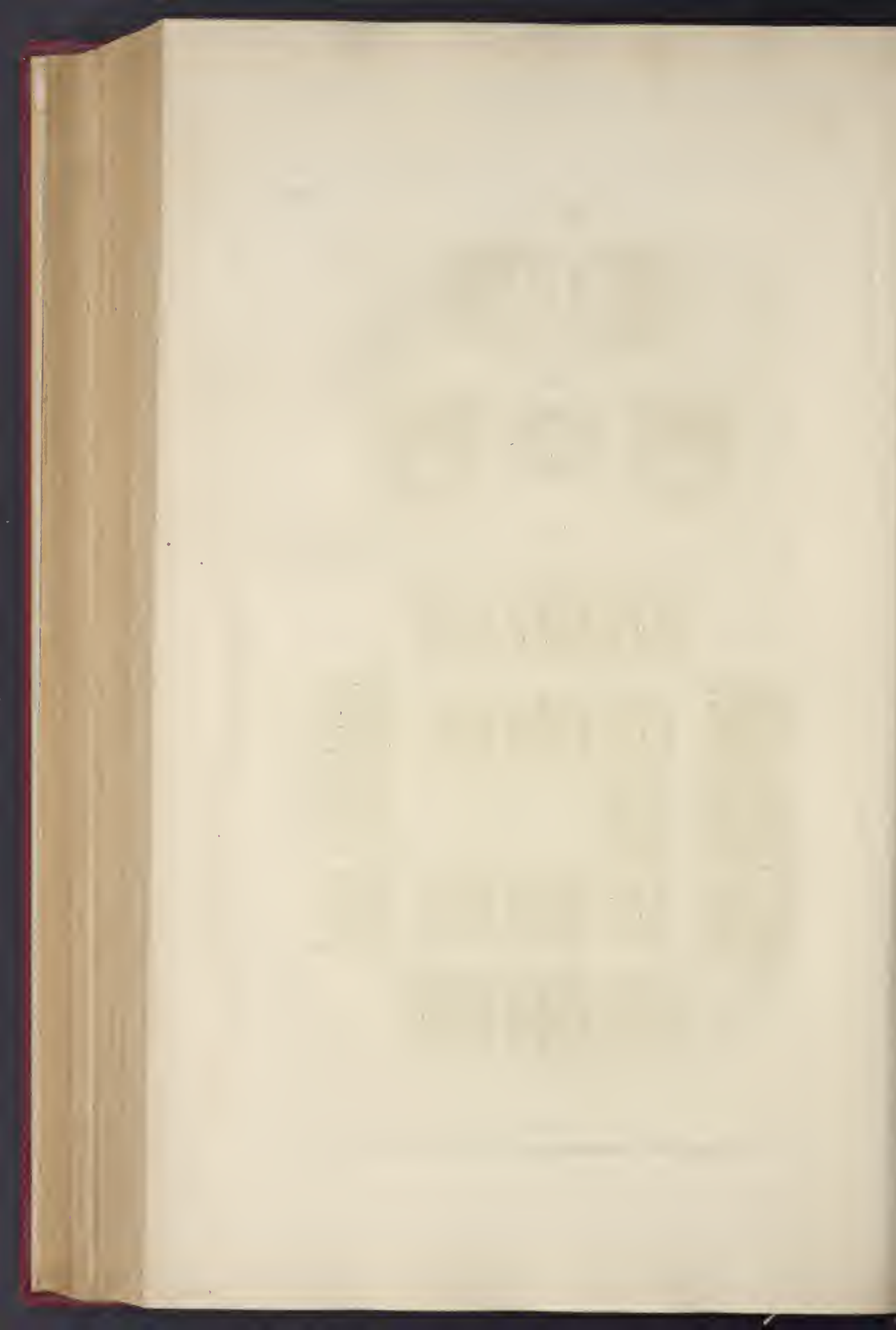


Fig. 3.





“Ὅταν δὲ χωρῖς, — τ’ ἄλλα μὲν οὐκ ἐν ὁμοίᾳ, — τὴν δ’ ἀγορὰν, καὶ τὸ ταμείον, καὶ τὸ στρατήγιον μέσον τιθέσσι τῶν ὁμοίων.

And when they encamp apart, — all other things are JUST AS THEY WERE; — but the Forum (or market), — the Quæstorium, or Treasury, — and the Prætorium, — they place, in the midst, between both Camps.

And on these words we may remark, that, if indeed all other things were placed just as they were before in a Consular camp; then the *Ablecti*, and *Selecti*; (the Consular guard of horse and foot;) and also the *Extraordinary horse, and foot*; would of course be placed in each camp just as at other times; — and consequently there must have been, in each camp, spaces actually left between these, for a *Forum*; a *Quæstorium*; and a *Prætorium*; where each Consul might, if he pleased, dwell: — from whence it follows, that the *Forum*, *Quæstorium*, and *Prætorium*, spoken of as placed between the Camps, could only be such as were to be used merely occasionally.

Such must be the conclusion of plain common sense, — and this conclusion is further strengthened, by the consideration, that if the *Consuls* had been to reside in this common *Prætorium*, between the Camps, whilst the tents of the *Ablecti*, *Selecti*, and *Extraordinaries*, were as usual placed within the separate Camps; — then they must in truth have resided most dangerously; — slightly guarded; — and without their usual attendants.

The fact, therefore, seems to have been; that the *Common Prætorium*, *Quæstorium*, and *Forum*, spoken of as placed between the Camps, were only for occasional purposes, of transacting joint business; — and for exercising the two *Consuls’ Joint Command*; in such matters only, wherein it was necessary for them to appear together.

This appendage of *Common offices* to the two Camps, could not well be placed so as to interfere with the easy access needful to the two *Decuman gates*; — neither could it, with propriety, be placed so as to interfere with the usual rule of placing the *Prætorian gates*, towards that part of the country, where was the *greatest danger*. — We may therefore conclude, that it was placed between the *side gates* of each Camp, that led from the *Principia*: — and this the rather, because the great street before the *Common Prætorium*, would, by that very means, in reality, become only an extension of the two

great principal streets, or *Principia*, running in the front of the *Prætoria* of the two separate Camps.

There cannot be a doubt but that the space occupied by these *common offices*, would be secured by ramparts; and therefore the plan, fig. 2. Pl. $\frac{\text{xxviii}}{5}$, may perhaps serve to convey some adequate idea of the whole.

In each of these modes of encamping, there must have been at least six outward gates. In the first instance, two *great Decuman gates*, (dd) one at each end: and four *principal gates* (oooo); two on each side.—And in the latter instance (when two of the principal gates would be as it were annihilated by the junction of the camps,) two *principal gates* (oo); one at each end: and two *Decuman gates* (dd) on one side: and two *Prætorian gates* (pp) on the other side. Whilst however there is reason to conclude, that sometimes there were gates at the end of the street *Quintana* (qq); which would, in such camps as these, make the complete number of gates to be eight, or ten.

In the first instance, the whole encampment would be about 4500 Roman feet, or 4346 English feet long; and 2250 Roman, or 2173 English feet broad. And in the latter instance, the two Camps, with the space between them, seems to have extended in length at the utmost 6750 Roman, or 6519 English feet.

Other camps, it is nevertheless true, had sometimes *six gates*, as well as the double Consular camps:—as we find is evident, from those curious remains traced out, by General Roy, of some of *Agricola's* camps.

These seem to have been mostly camps, where a single Legion, with its *Allies*, were entrenched; in such manner, as to have the two divisions of the whole placed *as wings* to the *Prætorium*, and to its immediately attendant troops; instead of having the *Allies* placed as wings to the Legionaries, as was always the case in a Consular camp.

At *Kirkboddø*, we have a most curious example of the whole of this sort of arrangement.—And *Kirkboddø* may the rather here be mentioned; because the dimensions, of that camp, as given by General Roy himself, will actually agree more exactly with the measures and proportions which have now been concluded to be

the right ones, in the preceding pages, according to the true meaning of the original words of Polybius; than those mentioned by General Roy, from Hampton's translation:—and because, on making trial, it will be found, that the space defined by the remaining entrenchments, and by the *precise position* of the remaining principal gates, could not indeed be at all filled up, by the encampment of a *Legion*, in any other manner; so as to have either proper room, or streets, corresponding with those gates.

It has already been mentioned, that the contents of the whole area at *Kirkboddo*, 2362400 English square feet, are nearer to the half of a Consular camp of 2250 feet, such as my measures make it, that is 2360964½ square English feet, than to the half of a Consular camp of only 2150 Roman, or of 2077½ English feet; which is only 2157310½ square English feet.

And if we take the *Prætorium* also, in this case, to have been (in due proportion,) half the dimensions of a *Consular Prætorium*; that is 400 Roman feet by 200; we shall find it will precisely occupy the space between the two *side gates*, at *Kirkboddo*, (which is about 430 feet on one irregular side, and 470 on the other,) so as to leave just the proper room *before it*, for the *Tribune's space*:—and, in like manner, for the *Principia*, running exactly corresponding with one gate on each side; and for the usual street *behind the Prætorium*, running exactly corresponding with the other gates on each side;—and, at the same time, so as to leave also just the proper room for a *Forum*, and a *Quæstorium*, and for the encampment of the *Ablecti*, and *Selecti* guards, *as wings*, on each side. All which dimensions would not so agree by any means, if the *Prætorium* were either 400 feet square, as in a Consular camp; or only 200 feet square.

Besides this, we shall find; that in this way of placing the whole, as is shewn in Pl. ^{xxviii}₃, fig. 2, there is, as nearly as may be, the proper room for one half of the *Legion*, and its *Auxiliaries*, towards the *Decuman gate*, and to the S.E. And as nearly the proper room for the *Extraordinaries*, and a regular great street beyond them; and for the other half of the *Legion*, with its *Auxiliaries*, towards the *Prætorian gate*, and the N.W. And it may be added, that whoever tries the experiment, of endeavouring to place *all* the maniples of a *Legion*, and its *Auxiliaries*, within the circum-

scribed space at *Kirkboddø*, with its positively defined position of its gates, in any other manner whatsoever, will find himself baffled.

A little short detail will shew how completely the space may be filled in this way.

If we take the camp to be in its length; at a medium, (allowing for the irregularity of its perimeter,) 2280 English feet, or 2360 Roman;—and to be in breadth 1080 English, or 1118 Roman, we shall find there was exact room for the disposition of a Legion, and its allies, in the following manner.

| In the whole Length from the Decuman gate on the S. E. to the Prætorium gate N. W. | In Breadth from S. W. to N. E. |
|---|--|
| A space next the Rampart - 200 + | Space next the Rampart - 100 + |
| Five maniples of Legionaries 500 | Two maniples of Allied foot (s p) 200 |
| The Principia - - - 100 | A street - - - - 50 |
| The space for the Tribunes (aa) 50 | Two maniples of Allied horse (s E) 200 |
| The Prætorium (rrrr) in length 400 | The main street - - - 50 |
| The street behind the Prætorium 100 + | A maniple of <i>Equites</i> , and one of <i>Triarii</i> - - - - 150 |
| The Extraordinaries - - - 150 | A street - - - - 50 |
| A great street - - - 100 | A maniple of <i>Principes</i> , and one of <i>Hastati</i> - - - - 200 |
| Five maniples of Legionaries 500 | Space next Rampart - - - 100 + |
| A space next the Rampart - - 200 + | |
| 2300 | 1100 |
| or 2360 | or 1118 |

and it is evident, that the irregularities in the outline of the encampment, so carefully marked in General Roy's plan, will quite sufficiently account for the little difference, of about 30 feet at each end, and of 9 feet on each side, more than answer to the exact geometrical delineation of such an encampment.—To say nothing of its being possible, that a part of the difference might arise, from various little irregularities of measuring in other parts,—as such irregularities certainly do appear, in the intervals, between the two *principal gates*, that remain on each side.

For in this instance, as indeed in most others, it appears, that though the *tactical design* of a *Roman camp* was always, as Polybius informs us, upon the most mathematical exact principle; yet, in general, the real hasty construction of any one individual camp, (after the appointed standards of guidance, leading from the *Prætorium*, were once pitched,) was only in fact, generally effected by

adhering to the appearance, from the eye, and by slight pacing, or rude measuring, just as time and circumstances would admit.

The manner in which the parts, about *the Prætorium*, might be conveniently disposed, with respect to their proportional measures, and situation, seems obviously to be this;—that the *Prætorium* (rrrr) (which would with propriety be the half of a *Prætorium* in a Consular camp, and therefore only 200 feet in breadth, though 400 feet long,) being placed in the midst, and taking up 200 Roman feet.

There would be left, on each side of it, two great spaces, as usual:—

The one for a *Forum*, (F), about - - - 200

The other for the use of the *Quæstor*, (T), also about 200

And then, on each of the outsides of these, there would be room for the due* proportional numbers of *Ablecti*, and *Selecti*;—namely, on one side, for two maniples of horse;

(a b)—and for two half maniples of foot (f) - - - 150

And the same on the other side - - - 150

And a space might be left, next the ramparts, on each side, of somewhat more than 100 feet - - - 100 +

By which means the whole space occupied, between the gates, would be about - - - 1100

or 1118

Hence therefore it may plainly be discerned, that a great part of the irregularity of the outline of the Camp, at *Kirkboddie*, and of the spaces left, near the surrounding rampart, or *Vallum*, seems to have been really occasioned, from the two principal streets, or *Principia*, not having been drawn originally quite parallel; but, instead of that, from their having been allowed, in the haste of encamping, to have the direction of each determined merely in consequence of the first placing of the standards about the *Prætorium*, as sufficient marks to the eye, for measuring from thence:—and, from the measuring of each part having been obviously performed, in a hasty manner, just such only as might be sufficient for present convenience, by the officers of each maniple.

Fig. 1. Pl. $\frac{xxviii}{3}$, represents the present state of the Camp, with

* See p. 90, 91.

the roads that intersect it, as traced by General Roy ; and with the exact position of its gates as they remain.

And in Fig. 2, is shewn the manner in which an encampment of a Legion and its allies, in the manner above described, might be, with the allowances here mentioned, adjusted to it.

Let us now consider its small appendage, of a little additional Camp at one corner ; and we shall find that there was just about space, within this, for one additional cohort, and its *Allies*, or *Auxiliaries*.

It was about 350 feet in length ; and about 320 in breadth ;—that is about $362\frac{1}{2}$ Roman feet by 331 Roman feet.

And there would consequently be room, considering the present precise situation of the remaining gate, for placing two maniples ; on the right hand side of a street of about twenty feet wide, running near the middle leading from the gate ;—and two maniples and an half, in depth,—as shewn in the plan :—and for one maniple, on the left hand of this street, with two and an half in depth as on the other side, in which case, the four Legionary bodies might be placed as is shewn by the letters (*e. t. p. h.*) and the two maniples of *Allied* horse as at (*se. se.*) : and the two maniples of *Allied* foot as at (*sp. sp. sp.*) dividing one of them into two half maniples ;—and there would be left about 20 feet on each side next the ramparts.

And as this encampment was a mere accession, of a small body of fresh troops, placed so near the Great Camp ; there seems to have been no other provision of room left for the *Chief Officer*, (or *Centurion* of the *Triarii*) than his detached tent, in his proper maniple ;—there being no need of any particular *Prætorium*, *Forum*, or *Questorium* distinctly, to this now merely adhering party.

A Cohort, it has been remarked, was a tenth part of a Legion ;—and consisted properly of a maniple of *Triarii* ;—a maniple of *Principes* ;—and a maniple of *Hastati* ;—with the usual accompaniment of a maniple of *Equites* ; and with the usual number of *Velites*, amounting to that of another maniple :—but these two latter bodies seem not to have been a necessary part of a Cohort. It consisted therefore of 30 horse, according to the estimate given us by Polybius, and of 420 foot soldiers, when it had its full *Legionary* complement. And as a *Legion*, which consisted of ten *Cohorts*, was sometimes

attended by the full number of Allies, or *Auxiliaries*;—and sometimes (as we find from several passages both in *Livy*, and *Polybius*;) by a smaller number;—so a Cohort had sometimes its full complement of *Allies*; and sometimes only a portion of them;—and sometimes only Allied foot, without even its own *Equites*; and without any Auxiliary horse:—but, in all instances, was deemed a perfect Cohort, provided the maniples of legionary, *Triarii*, *Principes*, and *Hastati*, were but complete.

When a *Cohort* had the full number of *Auxiliaries*, they consisted of two maniples of horse, of 30 each; and of two maniples of foot, which (as we have seen in the preceding investigation,) were of 168 men each: and contained, therefore, 60 horse; and 336 foot. And the whole force consisted of 90 horse; and 756 foot;*—and was commanded by the *first Centurion* of the *Triarii*, who was then the *Chief Captain*.—And if two Cohorts were united in the *station*, or *service*, they were then commanded by the *first Centurion* of the *Triarii* of the elder Cohort; who was then also deemed the *Chief Captain*.† Sometimes a *Tribune* attended one or two Cohorts; but not always.—And when he did attend,—it appears to have been to

* The numbers of a full Cohort may be computed in either of these ways;

| | | | |
|------------------------------|-------|--|-----|
| <i>Triarii</i> - - - - - | 60 | Or, <i>Triarii</i> , with their <i>Velites</i> - - | 34 |
| <i>Principes</i> - - - - - | 120 | <i>Principes</i> , with their <i>Velites</i> - - | 168 |
| <i>Hastati</i> - - - - - | 120 | <i>Hastati</i> , with their <i>Velites</i> - - | 168 |
| | <hr/> | | |
| | 300 | Legionary Cohort alone - - | 420 |
| <i>Velites</i> - - - - - | 120 | Allied foot, two Maniples of 168 each | 336 |
| | <hr/> | | |
| Legionary Cohort alone - - | 420 | | 756 |
| <i>Equites</i> - - - - - | 30 | <i>Equites</i> - - - - - | 30 |
| | <hr/> | Allied horse - - - - - | 60 |
| Legionary Cohort - - - - - | 450 | | |
| Allied foot two Maniples - - | 336 | Full Cohort - - - - - | 846 |
| Allied horse - - - - - | 60 | | |
| | <hr/> | | |
| Full Cohort - - - - - | 846 | | |

† Hence we may come to understand very nearly, the precise *station*, and dignity of the *Chief Captain*, who commanded in the Castle of *Antonia*, in Jerusalem, and who rescued *St. Paul*;§—as also of the *Centurion* who was warned to send for *St. Peter*;||—and of that honest, and excellent *Centurion*, who besought OUR LORD to heal his servant,¶—and from hence we

§ Acts, chap. xxi. ver. 31, 32.

|| Ibid. chap. 10. ver. 1.

¶ Mathew, chap. 8. ver. 5, 8.

administer justice only; and not to command as *Chief Captain* in the field;—unless very specially appointed to that purpose.

may better apprehend the historical particular circumstances relating to them all; who were indeed every one of them in considerable command, though in different stations, and degrees.

In the plain and unaffected narration given of the tumults that arose in the Temple, concerning *St. Paul*, we read;* that *tidings came unto the Chief Captain of the band, that all Jerusalem was in an uproar. Who immediately took Soldiers, and CENTURIONS, and ran down unto them.* And when the *Chief Captain* had determined to save *Paul* from the way-laying of the Jews, we further read, † that *he called unto him two CENTURIONS, saying, make ready two hundred Soldiers to go to Casarea, and Horsemen threescore and ten, and Spearmen two hundred, at the third hour of the night* (that is at nine in the evening).

And from these little particular circumstances, so slightly mentioned, we seem to have as plain an intimation as possible, that the Roman garrison, in the Tower of *Antonia*, consisted of *one or two Cohorts*, encamped within its court, or area, (which will hereafter be described;) and that this *Chief Captain*, was the *first Centurion* of the *Triarii* of the elder Cohort; and as Commander in Chief took up his residence in the Tower of *Antonia*, that had been built by the Jewish Kings of the *Assyrian race*, long before the time of Herod.‡—And, from the preceding observations, we may understand, that this Chief Officer must have had all the rest of the Centurions, (at least five to each Cohort, and four to each body of Allies, with nine Decurions of horse, and thirty-two inferior officers) under his command. So that, if there were *two Cohorts*, he was actually in command over nineteen Centurions; and, what we should call sixty-four subaltern officers.

And we seem further to have an intimation, that when he called for *two Centurions* to form an escort for the Apostle; that he called, in reality, for *two maniples*:—which, if we take them to have been, a maniple of *Triarii* of 60 men; and a maniple of *Principes* of 120 men; with 20 attendant *Velites*, would form just the 200 legionary soldiers first named.

Whilst, on this occasion, as horsemen were particularly necessary;—we shall find, that *two maniples of horse* (or 60) would be very near the number mentioned.—And, as it is well known, that sometimes the proportionate number of Legionary horse was increased, even to 330, or 400; § (in which case, the proportion in each maniple would be 33, or 40, or somewhat between both these numbers,) it is more than probable, that the *threescore and ten* sent with *St. Paul*, were exactly *two maniples* of Equites.

Further, as to the 200 *Spearmen* (as they are translated in our English version;) the description of whom has so greatly perplexed *Bera*, and *Hammond*, and other Commentators; we find they are called, by *St. Luke*, *ἑξήκοντα*; which word more peculiarly means *guards*;—and therefore as the *Extraordinaries*, and the *Ablecti*, and *Selecti*, (the real *Consular guards* of every Legion,) were always a part of the *Socii*, or *Allies*, there can scarce remain a doubt, but that these *two hundred*, were in reality 200 *Allied foot*; chosen on this occasion to attend this detachment.

* Acts, chap. xxi. ver. 31. 32.

† Acts, chap. xxiii. ver. 23.

‡ Josephi Antiq. lib. xv. cap. xi. sec. 4.

§ See Livy, lib. xliii. cap. xii. and lib. xl. cap. 1.

And now we shall find, how admirably the proportions of some of the most distinguished stationary Roman Castra, that still may be accurately traced in this Island, agree, in the minutest circumstances, with the principles of encamping laid down by *Polybius*, as here explained;—and shall be able to ascertain, very nearly, the precise force which each *Castrum*, or *Station*, contained;—and the very

And this whole idea is the rather confirmed, even consistently with our translation, where we read, *spearmen two hundred*;—because the Alexandrian manuscript, instead of *δεξιοβόλους*, has the word *δεξιοβόλους*; which properly means *lance bearers*, or *pikemen*; agreeing exactly with the description of the weapon most used by the *Socii*,* or *Allies*;—and because in the account given by *Josephus*,† of the *body guard of Vespasian*, (which being chosen out of the *Extraordinaries*, must have been chosen out of the *Allied troops*) they are by him described as *pikemen*, or *lance bearers*, *λογχοφόρος*.

Without therefore having recourse to Hammond's strained solution, of supposing them to have been a sort of *Lictors*, or persons destined merely to take custody of prisoners; we may perceive that the whole account, like every other true account in the perfectly true words of Sacred Writ, was in every minute particular, conformable to the military customs and usages of the times.

The pious proselyte *Cornelius*, who sent for St. Peter, is described‡ as residing in *Cæsarea*; and being of the band called the *Italian band*; but the Greek word is *ἐκ σπειρης*; which properly means of the *Cohort*, called the *Italian Cohort*. He seems, therefore, to have been its Commander, that is, the *Chief Centurion* of the *Tiliarii* of that Cohort, resident in the fortress of *Cæsarea*;—and accordingly here we find, § in exact consistency with the whole of the account given by *Polybius*, that he had not only slaves, and household servants, but a *peculiar guard of soldiers*, out of the *maniples*, attending constantly upon his person;—for we read, that he called two of his household servants, and a devout soldier of them that waited upon him continually.

That contemplative excellent *Centurion* also, at *Capernaum*, who besought Our Lord to heal his trusty servant,|| must probably have been in much the same rank, and situation;—as he was in such high esteem, that even *Elders* of the Jews carried his message;—and in such a situation of life, that he had built them a synagogue. And we find him, when using a similitude to express his faith, with great humility, describing himself as a man set under authority, *ὑπὸ ἰξουσίας τωστέμενος*; that is, *allotted, and chosen, to be placed in power*;—which words have even an obvious allusion, to the very manner in which the *Centurions* were first appointed out of the whole body of the soldiers in the *maniple*;¶—and leads us to conclude, that the next words, *ἔχων ὑπ' ἐμαυτὸν στρατιώτας*, *having soldiers UNDER me*,—refer not merely to common *legionary soldiers*, but to those *subordinate officers* appointed under him;—which renders the expression of his faith both more animatedly nervous, and more humble.

* See before, p. 79.

† See before, p. 61.; and *Josephus de Bello Jud.* lib. iii.

cap. vi. sec. 2.

‡ Acts, chap. x. ver. 1.

§ Ibid. ver. 7.

|| Luke, chap. vii. ver. 2 to 9.

¶ See the account of this before, p. 77.

order of its encampment.—And may even discern, with increased satisfaction, that the placing of the *Prætorium*, and of the *Decuman gate*, at Richborough, and other Fortresses, in a manner that at first sight has appeared irregular, and to have proceeded from accident, was not done without an obvious, and most useful design.

The Fortress at Richborough (which has already been so fully described*) was evidently intended to command one mouth of a great port, the antient *Estuary*; and for such a purpose we may conclude an extraordinary number of *horse* was not necessary. We find, therefore, on comparing its dimensions with Polybius's rules of encamping, that it would very well contain, even in its present mutilated state, either one entire Cohort, with the whole number of its allies;—and even with the addition of as many more allied foot;—or (supposing only a very little more of the precipitous bank to have been originally standing) two Cohorts, with their whole allied foot.

The external dimensions of its two most entire sides were originally about 490 feet;—and 560.—The one is still 490;—and of the other there still remains about 460 feet to the edge of the steep broken bank.—If therefore we deduct 12 feet, for the thickness of the walls, there will remain an area of about 466 feet wide, by at least 448 feet on one side, to the edge of the bank, within the walls; whilst we may very plainly perceive the bank to have been still more broken down by time, on the other side.

These dimensions, fairly taken, upon the least allowance possible, will be equivalent to $482\frac{1}{2}$ Roman feet by $463\frac{3}{4}$.

The spaces* that obviously remain on each side the Decuman gate (d), are about $197\frac{1}{2}$ English feet on the right hand, and about $247\frac{1}{2}$ on the left;—as nearly as possible equivalent to $204\frac{1}{2}$ Roman feet on the right, and $256\frac{1}{2}$ Roman on the left;—and the gate itself is 21 feet 1 inch English, or as near as possible about a little more than $21\frac{1}{2}$ feet Roman in width.

The perfectly well defined *Prætorium* (rrrr), at the distance of 265 English, or $274\frac{3}{4}$, or 275 Roman feet from the Decuman gate (d), is of much smaller dimensions than a *Consular Prætorium*; being

* From p. 5, to p. 22.

† These dimensions, and all those now referred to, are marked in the Plan on a large scale, Pl. XVI. p. 6.

only $144\frac{1}{2}$ English, or very nearly about 149 Roman by 104 English, or very nearly $107\frac{3}{4}$ Roman feet: and we may therefore very reasonably conclude, that the *Principal Street* also, or place for mustering the whole force, would in like manner be of less breadth, as well as the street behind the *Prætorium*; whilst there could not be wanting any additional space, in this *Castrum*, to be allotted for the tents of Tribunes;—as in a Consular camp.

And as in these sort of *castra*, (which were constant regular *stations*;) the walls, of enormous bulk, and strength, were so very high, that no ordinary missile weapon of early days could fly far over them, we may be well assured there was no occasion for any great space, more than quite an ordinary *road*, to be left next the ramparts; (as indeed there could not, by any possibility, be allowance for any unnecessary waste of the area).

With these *data*, therefore, as the precise situations of the *Decuman gate*, and of one of the *principal gates*, and of the *Prætorium*, are all so perfectly well ascertained by the present remains; we may evidently perceive, that one Cohort, and its allies, might easily be encamped here, even with an addition of as many more allied foot, in the following manner:

Roman Feet.

| | | |
|--|-------|-----|
| Allowing the main street, leading from the Decuman gate (d), to the Prætorium (r r r) to be in width | - | 50 |
| And measuring, to the right, along the principal street in the front of the Prætorium. | | |
| A maniple of <i>Triarii</i> , as usual (t) | - - - | 50 |
| A maniple of <i>Principes</i> , (p) | - - - | 100 |
| A space next the rampart | - - - | 40 |
| And measuring to the left, along the principal street. | | |
| A maniple of <i>Equites</i> , as usual (e) | - - - | 100 |
| A maniple of <i>Hastati</i> (h) | - - - | 100 |
| A space next the rampart | - - - | 40 |

This mode of encampment fills up exactly a space of 482

So that there is only $\frac{1}{2}$ a foot between the actual measure of the *castrum* and this allotment.

And the precise divisions, on each side, agree as exactly;

Roman Feet.

First, on the right, with $204\frac{1}{2}$ and the addition of the half of the Decuman gate $10\frac{1}{2}$ - - - - - 215

For 25, the half of the *main street* + 50 + 100 + 40 is equal to - - - - - 215

And then, on the left, with $256\frac{1}{2}$ and the like addition of $10\frac{1}{2}$ - - - - - 267

For 25, the other half of the *main street* + 100 + 100 + 40 is equal to - - - - - 265

Which leaves only *two feet* to be somewhere or other accounted for, from mistakes in the first measuring;—an inaccuracy far less than the actual deviation of the *north-west wall* from a right line.

Measuring along the *main street*, from the Decuman gate, to the verge only of the present bank;—(which however is 110 English, or about 114 Roman feet, beyond the *Prætorium*, and projects about 33 feet further than the bank at the end of the north-east wall,) there still appears to have been room, for

| | | |
|---|--------------|-------------------|
| A space next the rampart | - - - - - | 35 |
| A maniple of <i>Allied horse</i> , (SE) | - - - - - | 100 |
| The maniple of <i>Equites</i> , (E) | - - - - - | 100 |
| The <i>principal street</i> | - - - - - | 40 |
| | Amounting to | 275 |
| The <i>Prætorium</i> (rrrr) | - - - - - | 107 $\frac{3}{4}$ |
| The street behind the <i>Prætorium</i> | - - - - - | 40 |
| An half maniple of <i>Allied foot</i> | - - - - - | 50 |
| And a space still left next the bank, even in its present mutilated state | - - - - - | 24 |
| | | 114 |
| | In all | 496 $\frac{3}{4}$ |

The precise station, therefore, of every band, or maniple, would be, as is shewn in Pl. $\frac{xxviii}{4}$ fig. 3; where, to render every thing the more clear, the whole is laid down upon the same scale with the great Consular camp.

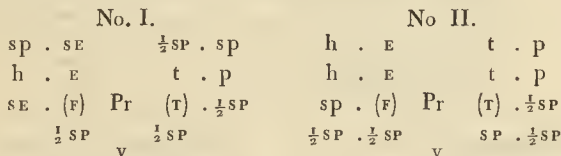
And as there is in the Castrum about 189 English, or $195\frac{3}{4}$ Roman feet, on the left side of the *Prætorium*; and about 133 English, or $137\frac{3}{4}$ Roman feet, on the right side of the *Prætorium*;—these spaces would contain,

| | |
|---|-------------|
| On the left side of the Prætorium. | Roman Feet. |
| The space next the rampart - - - - | 40 |
| The second maniple of the <i>Allied horse</i> (SE) - - | 100 |
| And a Forum (F) of an 107½ feet in length, and in width | 55¾ |
| | 195¾ |

And on the right side.

| | |
|---|------|
| The space next the rampart - - - - | 40 |
| Half a maniple of <i>Allied foot</i> - - - - | 50 |
| And a space for a <i>Pay office</i> , (T) similar to the <i>Quæstorium</i> of a Consular camp, 107½ feet in length, and in breadth | 47¾ |
| | 137¾ |

When two entire Cohorts, with their whole Allied foot, might at any time be encamped;—it would only require one more half maniple of *Allied foot*, to be added lengthways, on the left of those, in the former instance, encamped behind the Prætorium;—and on the right, the addition of two other half maniples:—one to be placed so as to make the first half maniple, on the right, (by its greater depth) an whole maniple; and the other half maniple to be placed against it, fronting the side rampart. So that, in the first instance, the maniples would be according to *the letters*, corresponding with the distinct divisions, in the annexed scheme in No. 1.; and in the latter, according to those in No. 2. And in both instances, it will only be requisite, to apprehend, that a very small portion more of the precipitous bank might have been originally standing, than we now find.



If we may be allowed to suppose, that before the falling of the original bank, the Castrum was at first bounded by walls measuring on the outsides 490, and 560 English feet; and was indeed nearly a regular *parallelogram*, then it would contain, with perfect convenience, *two Cohorts*, and all their *Allied foot*; with at least one additional maniple of *Allied horse*, (as a guard for the Chief Captain),

which might be a proportion perhaps most properly adapted to a *Sea-port*, where *horse* were almost useless.

And the *Castrum* would contain this force, by only making each *half maniple* behind the *Prætorium*, *an whole maniple*, with the half maniple, as in the former instance, on the right hand; and by placing the *Allied horse*, on the left of the *Prætorium*, where, in the second instance, were placed *Allied foot*.

These two latter sorts of encampment are shewn in fig. 4, Pl. ^{xxviii}/₄; the dotted lines extending over the broken bank, marking the additions, necessary for the last mentioned mode of encamping.

And the respective divisions (in such last instance) would stand thus,

| | | | | |
|---------|----|---|-----------------------|--|
| | | v | | |
| h . E | | | t . P | |
| h . E | | | t . P | |
| SE . F | Pr | | T . $\frac{1}{2}$ SP | |
| SP . SP | | v | SP . $\frac{1}{2}$ SP | |

The whole number of troops, therefore, encamped at *Richborough*, it appears might be, in the first instance, at least 1182;*—in the second instance 1572;†—and in the third instance, of supposing the Camp a little more entire, though retaining nearly the same boundary, 1602.‡

| | | | | | | |
|---------------------------|-------------------------|----|---|---|---|-----|
| * <i>Triarii</i> | 60, and <i>Velites</i> | 24 | - | - | - | 84 |
| <i>Principes</i> | 120, and <i>Velites</i> | 48 | - | - | - | 168 |
| <i>Hastati</i> | 120, and <i>Velites</i> | 48 | - | - | - | 168 |
| | | | | | | |
| Cohort | - | - | - | - | - | 420 |
| Equites | - | - | - | - | - | 30 |
| Allied foot two maniples | - | - | - | - | - | 336 |
| Allied horse two maniples | - | - | - | - | - | 60 |
| Additional Allied foot | - | - | - | - | - | 336 |
| | | | | | | |

| | | | | | | | |
|--------------------------|-----|---|-----|--------------|---|---|-----|
| 1182 | | | | | | | |
| † 1st Cohort | - | - | 420 | ‡ 1st Cohort | - | - | 420 |
| Equites | - | - | 30 | Equites | - | - | 30 |
| 2d Cohort | - | - | 420 | 2d Cohort | - | - | 420 |
| Equites | - | - | 30 | Equites | - | - | 30 |
| | | | | | | | |
| 900 | | | | | | | |
| Allied foot two maniples | 336 | | | Allied foot | - | - | 336 |
| Allied foot two maniples | 336 | | | Allied horse | - | - | 30 |
| | | | | | | | |
| 1572 | | | | | | | |
| | | | | | | | |
| 1602 | | | | | | | |

Two Cohorts and their horse are exactly the $\frac{1}{10}$ th part, in point of Legionary command, of a *Consular camp*;—but the proper space they occupy *therein*, is only about $\frac{1}{20}$ th part of the whole Camp.—And it is very remarkable, that, at *Richborough*, the still existing well defined *Prætorium*, of 149 Roman feet, as nearly as possible, by $107\frac{1}{2}$, is just about *one tenth* of a *Consular Prætorium* of 400 feet square:—whilst the area of the Camp itself of 466 English, or $482\frac{1}{2}$ Roman feet, by 536 English, or 556 Roman, (allowing the walls to have been every where about 12 English feet thick, + and the whole camp to have been a regular *parallelogram*, without any diminution from the bank or precipice at all,) is only about *one twentieth* part of the area of a Roman *Consular camp* of 2250 Roman feet square.‡

It is indeed 15145 square feet, or about $\frac{1}{10}$ th larger than the $\frac{1}{20}$ th of a Roman *Consular camp*:—but this difference is no more than may easily be accounted for, either in consequence of somewhat a greater space, in proportion, having been deemed necessary here, in the parts about the *Forum*, and *Quæstorium*;—or else from the original boundary of the Camp, not having extended in every part quite so far beyond the present bank, as has here been allowed.

And now, surely, this whole consonancy of proportions may be adduced, as a still stronger proof of all the conclusions in these pages:—whilst it deserves to be particularly noticed, that every one of the allotments of the particular stations of the several *maniples*, of the several orders of Roman soldiers, agree most precisely with the exact situation of the great *Decuman gate*;—and do most

* For $149 \times 107\frac{1}{2} = 64070$ square half feet = $16017\frac{1}{2}$ square feet.
 And $400 \times 400 = 160000$
 And $\frac{160000}{10} = \dots \dots \dots 16000$, making a difference of only
 $17\frac{1}{2}$ square feet.

+ $560 - 24 = 536$.

| | Square Feet |
|--|-------------|
| ‡ For $2250 \times 2250 = \dots \dots \dots$ | 5062500 |
| And $482\frac{1}{2} \times 556 = 1073080$ square half feet = | 268270 |

| | |
|---------------------------------------|--------|
| Whilst $\frac{1}{20}$ th of 5062500 = | 253125 |
| And the difference is only | 15145 |

thoroughly, therefore, account for its being so very much on one side, rather than being in the exact middle of the *north* west wall.

Pursuing these same principles of reasoning, and these ideas, we may next observe, that *Burgh Castle*, in Suffolk,* would contain at least *one entire Cohort and an half*, with their allies, even in its present mutilated state, allowing (as it appears to me we must do) the mount to have been, not any original Prætorium; but a mere addition, and an encroachment upon the original area of the Camp, made in Saxon, or Norman times.

And indeed the precise situation of the remains of one of the *principal side gates*, convince me, that this camp never could contain much more force;—though there might be a little space (by means of a former extension of the original bank,) behind an original Roman Prætorium, for a few extraordinary horse, or foot.

The extent of this noble remain, on the east side, is nearly 642 English, or about $66\frac{1}{2}$ Roman feet:—and on the north and south sides, it is still about 321 English, or $332\frac{1}{2}$ Roman feet.

The Decuman gate, the obvious situation of which may still clearly be distinguished, on the east side, between two projecting round towers;—is not in the middle of the *east wall*, but has about 301 English, or $311\frac{1}{2}$ Roman feet on one side; and about 341 English, or 353 Roman feet on the other: and the principal gates were so situated, in each side wall, as to have about $180\frac{1}{2}$ Roman feet on the side towards the east wall; and about 152 Roman feet towards the broken bank.

Now then, with these data, we may perceive, that *one Cohort, and its Allies*, might be encamped, in the manner represented in Pl. $\frac{\text{xxviii}}{4}$, fig. 5, as follows:

Beginning from the northern extremity of the Castrum, which is here placed uppermost in the Plate, (both for the sake of uniformity with the placing of Richborough Camp;—and also for the sake of shewing, that no regard was ever paid, as to the point of the compass, or quarter of the heavens, in placing the great Decuman gate.—Beginning from the northern extremity, we have room for,

* Which has already been described in the preceding pages, from p. 52 to 55.

| | Roman Feet. |
|---|-------------|
| A space next the rampart - - - - - | 18 |
| Two half maniples of <i>Allied foot</i> (sp) (sp) in width - | 200 |
| A street, which may very well be allowed to have been of this narrow breadth ; because, in some instances, there would have been, in this situation, no street at all ; two maniples of <i>Allied foot</i> having been sometimes placed in one inclosure, and not separated from the next adjoining maniple by any street - - - - - | |
| | 10½ |
| A maniple of Legionary Equites, or horse, (who having the <i>main street</i> , for their marching out, could have no use for the narrow street of separation) - - - - - | |
| | 100 |
| The main street, leading from the <i>Decuman gate</i> (d) | 50 |
| A maniple of <i>Triarii</i> , as usual - - - - - | 50 |
| A maniple of <i>Principes</i> , as usual - - - - - | 100 |
| A street for the use both of <i>Principes</i> , and <i>Hastati</i> ; and therefore broader than the other <i>side street</i> - - - - - | |
| | 18 |
| A maniple of <i>Hastati</i> - - - - - | 100 |
| A space next the rampart - - - - - | 18 |
| | 66½ |

In depth from the *east wall*, and *Decuman gate*, to a little further than one of the principal side gates,—and ranging in a line, where we may most justly conclude the front of the original Roman *Prætorium* to have been placed, there will be found

| | |
|---|------|
| A space next the east wall - - - - - | 18 |
| The breath of the <i>half Cohort</i> , and its Allies, placed towards the eastern wall (as just described) - - - - - | 50 |
| The breadth of an entire Cohort, placed fronting the principal street - - - - - | 100 |
| The breadth of the <i>principal street</i> , as at Richborough | 40 |
| The <i>Prætorium</i> ;—which may be allowed to have been as large as that at Richborough ;—(though most probably it was somewhat smaller) might be in breadth - - - - - | 107½ |
| And then there would be at least, beyond it towards the present bank - - - - - | 17 |
| | 332½ |

And as to the disposition of the encampment on each side of the *Prætorium*, there might be,

On the left hand, next *the original wall*,

| | | |
|--|-----------|-------|
| A space next the rampart | - - - - - | 18 |
| Two maniples of Allied horse for the whole Cohort (SE) (SE) | | 200 |
| A space for the <i>Quæstor</i> , and pay office (T) | - - - - - | 60½ |
| The <i>Prætorium</i> (TTTT);—if as large as that at <i>Richborough</i> | | 149 |
| A space for a <i>Forum</i> (or market) (F) | - - - - - | 119 |
| Another maniple of Allied horse, for the half Cohort (SE) | | 100 |
| And another space, next the other rampart | - - - - - | 18 |
| | | <hr/> |
| | | 664½ |

It may be observed here, that the space assigned for the *Forum*, is more than double of that at *Richborough*;—and that assigned for the *Quæstor's* use, somewhat more also than that at *Richborough*; whilst we have allowed the *Prætorium* to have been of the same size as that at *Richborough*; although the camp (estimated from the appearance of the present bank) was so much less.

But if we venture to suppose the *Prætorium* to have been, in due proportion, *somewhat less*;—and the precipitous bank to have originally extended forwards only a little further towards the river;—then, reducing the *Forum*, and *Quæstorium*, to the same size as at *Richborough*, there would have been room here for some little additional band of *Evocati*, or volunteers; who might be properly added, if at any time a *Tribune* resided here.

And indeed if the *bank* may be apprehended to have extended originally about 90 feet nearer towards the river; there would even have been room for *two whole Cohorts*, and all their *Allied foot*, with at least half of their *Allied horse*, and the *Prætorium* might have been exactly of the same dimensions as at *Richborough*.

As the bank is,—the force would have been, only

| | | |
|-----------------------------|-----------|-------|
| An half Cohort | - - - - - | 210 |
| Its <i>Equites</i> | - - - - - | 15 |
| Its Allied foot | - - - - - | 168 |
| Its Allied horse | - - - - - | 30 |
| A whole Cohort | - - - - - | 420 |
| Its horse or <i>Equites</i> | - - - - - | 30 |
| Its Allied foot | - - - - - | 336 |
| Its Allied horse | - - - - - | 60 |
| | | <hr/> |
| Amounting in the whole to | - - - - - | 1269 |

And this being rather a more *inland* situation, and near the mouth of *two* rivers; may perhaps account very well for an allowance, such as has been here assigned, of a greater proportion of *horse*.

Nor will the proportion of the allotment of space be much altered, even if any one should deem it necessary to imagine (contrary to the convictions in my mind, and which are mentioned in the preceding pages*) the present high mount to have been some earlier *British Mount*, preserved by the *Romans*, and used by them as a *Prætorium*;—because, even in that case, the taking away what I have deemed to have been the original *Prætorium* (rrrr), will make more than sufficient room for the *maniple of Allied horse*, supposed by me to have been placed where the mount (which I conceive to have been *merely Saxon, or Norman*) now is.

The outlines of the mount now existing, and of its ditch, are marked by dotted lines in the Plan, Pl. $\frac{\text{xxviii}}{4}$, fig. 5, where the whole of the allotment of space, is represented, (as *Richborough* was) on the same scale with a *Consular Camp*.

And I must add, that the *situation* of the mount, with respect to the remaining Roman walls, shews as strongly as its peculiar form, and the other circumstances relating to it, that it never can have been a *Roman work*.

At *Portchester*, again, we have another instance of a great *Port Castrum*.—Its walls remain still nearly entire:—and its spacious contents can therefore be still more accurately ascertained.

And here we find inclosed, to this hour, in a truly *Roman* manner, excepting only the alteration that has been made at the *north-west* corner, and at the antient *Decuman gate*, an oblong square of about 598 English, or $619\frac{1}{2}$ Roman feet; by about 608 English, or $629\frac{1}{2}$ Roman feet†:—measuring about 610 English feet, by 620, on the outside of the walls.

* Page 53.

† The nearly exact external dimensions, as taken by my measures on the outside, are given in Pl. XXI.—They amount, it will be found, to $629\frac{1}{2}$ feet, on the east, and on the west sides, in which were the *Decuman*, and *Prætorian gates*;—and to 644 on the north, and 643 on the south, in which two sides were the *principal gates*;—and if we deduct $19\frac{1}{2}$ feet, on account of the projection of the corner towers, on the east and west sides; and 23 feet for the projections of the same corner towers, on the north and south sides (as appeared to me the most reasonable to do);—there will remain on the outside of the walls, 610,

We find also the positively defined situation of the *Prætorian* and *Decuman* gates, determining the situation of the *main street*.—And we find the situation of the present church; ascertaining nearly whereabouts the antient *Prætorium*, with its *Sacellum*, was.

With these data then, we may easily ascertain, the disposition of the *Roman* troops, in this celebrated, and interesting *Castrum*;*—and also, nearly exactly, what number it contained:—and shall here again perceive, why the *Decuman*, and *Prætorian* gates, were not exactly in the middle of their respective sides.

If we trace the distances, on each side of the mid-way of the *Prætorian gate*, (which is to this hour nicely ascertained) we shall find there were nearly, on the right-hand side, (standing fronting it within the *Castrum*) $287\frac{1}{2}$ English, or about $297\frac{1}{2}$ Roman feet:—and on the left hand side, $310\frac{1}{2}$ English, or about $321\frac{1}{2}$ Roman feet.†

Allowing then the same computation for the distances on each side of the mid-way of the original *Decuman gate*; (which must have been precisely opposite to the former; we have room, in the space of the $321\frac{1}{2}$ Roman feet, extending on the right hand of a person standing at the *Prætorium*, for an entire Cohort, as follows:

by 620 (or 621) feet; the little difference of one foot being probably occasioned, either by some small mistake in my measuring, or by some trifling want of precise exactness in the planning out the space originally.

The walls, it has been observed, are in general about 6 feet thick;—and therefore if we proceed still further, to deduct that thickness, we shall find 598 feet, by 608, or 609, left for the dimensions of area within.

It may perhaps be thought, that somewhat more than the $11\frac{1}{2}$ or $9\frac{3}{4}$ feet that I have allowed, should be deducted for the projection of each corner tower; but that at most can make very little difference:—and it should be here mentioned, that the measuring the whole space, on the outside, was preferred; because the distances between the projecting towers, could not be ascertained by any measuring whatever within the castle walls.

* See the full account of it, under all its various alterations, in the preceding pages, from 22, to 35.

† In all these computations the fractions of the proportional Roman feet might be more exactly ascertained;—but on such an occasion as the distribution of the maniples, in the order of encampment, it is not only needless, but would even be impertinent.

The many doubts which there have been about the exact proportion of the *Roman foot*, are well known to the learned.

In general it has been supposed, that the Roman foot was 11,6 inches of the English;—

Roman Feet.

| | |
|---|-------|
| Half the main street, supposing it to have been 50 feet | |
| broad - - - - - | 25 |
| A maniple of <i>Triarii</i> (t) - - - - - | 50 |
| A maniple of <i>Principes</i> (p) - - - - - | 100 |
| A street - - - - - | 24 |
| A maniple of <i>Hastati</i> (H) - - - - - | 100 |
| A space next the rampart - - - - - | 22½ |
| | <hr/> |
| | 321½ |

And on the right hand side of the entrance, (or on the left of a person standing at the *Pretorium*) we have room, in the space of 297½ Roman feet, for

| | |
|--|-------|
| The other half of the main street - - - - - | 25 |
| A maniple of <i>Equites</i> (E) - - - - - | 100 |
| A maniple and an half of <i>Allied foot</i> (sp) - - - - - | 150 |
| And a space next the rampart - - - - - | 22½ |
| | <hr/> |
| | 297½ |

or 11,604. The inquiry was entered into with the minutest exactness by the celebrated *Greaves*, and his conclusions were first published in 1647; and afterwards in the same volume with his *Pyramidographia*, p. 131.

After his nicest investigations, he found the foot of *Villalpandus*, as deduced from the *Congius of Vespasian*, to be 986 parts of an English foot, taken from the *iron standard at Guildhall in London*, and supposed to contain 1000 such parts.

But he found the Roman foot, on the monument of *Statilius*, to contain only 972 of those parts.

And he found the Roman foot, on the monument of *Cossutius*, (usually called the *pes Colotianus*, because it was placed in *hortis Colotianis*) to be only 967 of such parts.

Mr. Greaves has not told us, at what time of the year he examined the *iron standard at Guildhall*;—and we now well know, (because it is *iron*,) that its measure will not be exactly the same in *winter*, as in *summer*; when examined with the minuteness that these sort of inquiries demand, for *mathematical* computation.

I leave therefore the minute nicety of most exact mathematical computation, out of the question. And as it appears, from General Roy's computations in general, that he has (as some others also have done) taken the Roman foot to have been even rather under this proportion, I have, in order to accommodate my conclusions, in the fairest manner, to all his plans, taken my computations from a supposition, that, according to his conclusions, in his Plates IV. and V. in round even numbers, 1050 Roman feet, were about equal to 1014 English;—and 2150 Roman, about equal to 2077½ English;—though any one, on minute

Nor can there be any objection to the conclusion that, in this Castrum, a maniple and an half of Allied foot, were placed together in one common inclosure, in this manner; because sometimes even *two whole maniples* of Allied horse, or *two whole maniples* of Allied foot, were actually so placed in one common inclosure:—and General Roy concluded that they were *always* placed so, even in a great Consular camp:* and leaves us to conclude, that it might be a sort of distinction, indicating the *inferiority* of the Allied troops to the Legionaries.

Supposing then, *three entire Cohorts*, with all their Allied foot, and half their Allied horse, to have been stationed within this Castrum);—(which proportion of cavalry might be a very fit one, because of its being a sea-port);—we shall find there would be the best adjusted room possible to contain them.—And that there would be the following divisions of space, from west, to east; between the *Decuman*, and *Prætorian* gates.

computation, will find that neither here, nor in other parts, do all his calculations exactly, and with arithmetical precision agree.

I am however perfectly satisfied, that this mode of computation is sufficient, both in *his* calculations, and in my thus following him, in order to adopt my conclusions to *his* plans:—because, most certainly, *mathematical minutenesses* of admeasurement, and computation, were never apprehended, or attended to, by the *Romans* themselves, on these occasions:—and (even if they had been ever attended to by them,) were most certainly never regarded, in the measuring out of their *Camps*, or of their *Castra stativa*; where we may be assured only rude common measures were their guide.

And indeed, after all, the difference arising from nice computation, would not be such as to effect materially any of the conclusions in these pages.—They could at most only make a street or two, or a space or two next a rampart, a very small part of an inch narrower, or a very small part of an inch broader; which could never be of any consequence.

It appears indeed to me that 1050 Roman feet are not exactly equal to 1014 English;—though I have, in compliance with General Roy's publication, Pl. V. so adapted my computation; but that they are rather more equal to $1014\frac{1}{2}$, or even to 1015; yet supposing that to be the case, what difference can that half, or that one foot make, in the construction of a Roman Station, or Camp, either in the minuter subdivisions of a *station* into *maniples* and streets?—or in those of the whole 1014, or $207\frac{1}{3}$ feet of a Great Camp?

* See his Plan, Pl. IV.—And his account of the Roman camp, p. 44; and my only reasons for differing from him, in this respect, even with regard to a Consular camp, may be seen in this Volume, p. 86, 87.

| | | | | | |
|---|---|---|---|---|------------|
| A space next the Rampart | - | - | - | - | 22½ |
| Three maniples of <i>Triarii</i> , belonging to the three Cohorts | | | | | |
| (t) (t) (t) | - | - | - | - | 300 |
| The principal street, in due proportions, for a Castrum | | | | | |
| of these dimensions | - | - | - | - | 50 |
| A <i>Prætorium</i> (rrrr) here larger than at Richborough | | | | | 134½ |
| A street behind the <i>Prætorium</i> | - | - | - | - | 50 |
| An half maniple of <i>Allied horse</i> (sE) | - | - | - | - | 50 |
| And a space next the rampart | - | - | - | - | 22½ |
| | | | | | <hr/> 629½ |

Three Cohorts are a little more than *one seventh* part of the *Legionaries* of a *Consular army*:—and if we allow the *Prætorium* at Portchester to have been, therefore, in due proportion, as that at Richborough was; and to have been a little more than *one seventh* of a *Consular Prætorium*; its length would have been about 170 feet,* whilst its breadth was about 134½ or 135.

And being of these dimensions, we shall find there was room on the north side, for

| | | | | | |
|--|---|---|---|---|------------|
| A space next the rampart | - | - | - | - | 22½ |
| An half maniple of <i>Allied foot</i> (sP) | - | - | - | - | 50 |
| A maniple of <i>Allied horse</i> (sE) | - | - | - | - | 100 |
| A space for a <i>pay office</i> (τ) | - | - | - | - | 64 |
| Half the <i>Prætorium</i> | - | - | - | - | 85 |
| | | | | | <hr/> 321½ |

And on the south side, for

| | | | | | |
|----------------------------------|---|---|---|---|------------|
| Half the <i>Prætorium</i> | - | - | - | - | 85 |
| A space for a <i>Forum</i> | - | - | - | - | 90 |
| A maniple of <i>Allied horse</i> | - | - | - | - | 100 |
| A space next the rampart | - | - | - | - | 22½ |
| | | | | | <hr/> 297½ |

And between the *Prætorium*, and the *Prætorian gate*, there would be room on each side the usual great street of 50 feet broad, for an half maniple of *Allied horse* (sE), and an half maniple of *Allied*

* For $170 \times 135 = 22950$ square feet.

And one seventh of a *Consular Prætorium* $= \frac{400 \times 400}{7} = \frac{160000}{7} = 22857\frac{1}{7}$.

foot (sr), with space left at the two ends, or corners of the Castrum, as in a Consular camp, for the reception of strangers.*

The whole disposition, according to this idea, is shewn Pl. ^{xxviii}, fig. 6. And it is surely not a little remarkable, that here again, the adjustment of a possible exact position for the legionary troops, precisely accounts for the *very situation* in which we find the remains of the *Prætorian gate*, next the sea, to this hour.

The space of the great and wide Decuman gate has been filled up, and a *Norman tower* of entrance has been built nearly, but not exactly, on the spot:—whilst however we may be assured, that the original entrance here, was exactly opposite to the *Prætorian gate*.

The whole force then contained in this Castrum, would be about 1764 foot; and 180 horse;—in all 1944 men.

And with *Evocati*, or volunteers (who might be placed with the troops near the *Prætorium*), it might amount to 2000.

| | |
|---|------------|
| Namely, three Legionary Cohorts, of 420 men each | 1260 |
| And three full bodies of Allied foot, of 168 each | - 504 |
| | <hr/> 1764 |

And three maniples of Legionary equites, of 30 each

90

With three single maniples of *Allied horse* of 30 each,
being half the proportion for each *Cohort*

- - 90

180

These *stations*, or Stationary Castra, were enclosed within massy, and strongly fortified walls;—but one of those, enclosed within *mere earthworks*, near Ardoch in Scotland, and which has already been described† in these pages, deserves to be particularly noticed, on this occasion;—because it is very obvious, upon inspecting it narrowly, that in order to save the waste of space within; and to allow the *maniples* here, as in the former instances, to be placed as near as possible to the rampart; and so as only to leave room for a proper passage; the deficiency of high walls to keep off weapons, is supplied by no less than six deep fosses, and high ramparts,‡ one beyond another; extending outwards to the breadth of 200, and in some places to nearly that of 300 feet, beyond the inward area.

* See page 90. † See p. 69; and Pl. XXVIII. fig. 8.

‡ See before p. 71.—And Roy's Military Antiquities p. 126.

Mr. Pennant, surveying this Camp only hastily, and in a general manner, concluded it to be about 450 feet by 400:—but by the Plan of General Roy,* who is apprehended to have obtained more exact measure, it appears to have been about 490, by 425, on the inside of the works.

These measures, reduced to Roman feet, will make the whole inclosed area to have been in length, from north to south, or from one *principal gate* to the other, about $507\frac{3}{4}$,—and the breadth, from the *Decuman gate* (d), on the east, to the *Prætorian gate*, next to the antient ford of the river, and to Ardoch bridge, about 440 Roman feet;—whilst the spaces on each side the Decuman gate, will be 170 English, or $176\frac{1}{2}$ Roman, on the southern side from the gate, and 300 English, or $310\frac{1}{2}$ Roman feet on the north side of the gate;—the gate itself being still about 20 English, or $20\frac{1}{2}$ Roman feet wide.

The principal gates are 220 English, or 228 Roman feet, from the inside of the eastern rampart; and being now each, by means of the way cut through them, about 20 English, or $20\frac{1}{2}$ Roman feet wide, they bring us to a level, in a right line, with the front of the supposed *Prætorium*, at the distance of about 240 English, or $248\frac{1}{2}$ Roman feet, from the *Decuman gate*.

Attending then to these measures,† we may instantly perceive, that this station, justly concluded to be the *Lindum*, (like *Richborough* in its more enlarged state of perfection, to which *Castrum* it bears a very strong analogy) might contain, in the manner represented, Pl. $\frac{XXVIII}{4}$, fig. 7. *two Cohorts*, and *all their Allied foot*, with one additional maniple of *Allied horse*, as a guard for the *Chief Captain*, or *first Centurion of the Triarii of the eldest Cohort*;—who would of course reside in the *Prætorium*, attended, in due proportion, by a regular detached guard from each maniple of the two Cohorts, consistently

* Military Antiquities Pl. XXX. † I apprehend, and as it appears to me with good reason, from the most close examination of General Roy's *two plans*, and of his scale annexed to Pl. X. of the *Military Antiquities*, that these measures may be depended upon:—but it gives me much concern to be obliged to say, that on endeavouring to verify the whole, by his large Plan, Pl. XXX. I found the very scale itself, in that Plate, to be most incorrect; which any one will discover, who takes the trouble to measure it with a pair of compasses.—This, however, might be an accident, at the Engravers:—but that *one scale*, it is a duty to say, is not to be depended upon.

with what has already been mentioned concerning a *Prætorian guard*, from Polybius.*

The manner in which such a force might be disposed of, in this *Castrum*, is very obvious, from the measures that have been just given.—But before we allow that manner to become a fixed idea in our minds, it ought to be recollected, that what unquestionably appears to have been a part belonging to the *Prætorium*, has been observed to stand here, *in its present state*, in a very unexpected position; not parallel to the sides of the *Castrum*;—and obviously placed very irregularly in General Roy's Plans, with regard to all its gates.—This, at first sight, might be imagined to have been occasioned by hasty encampment; and indeed, even when I printed the foregoing pages,† I was induced to concur in allowing that conclusion:—but on more close inspection, and on deep consideration, I must conclude the present supposed (and rightly supposed) remain of a *Prætorium*, to have been not actually *the whole* of the original *Prætorium*, but only a part of the actual spot;—the rest having been, in these later ages, pruned away.

Its dimensions are *now* only 75 English, or $77\frac{1}{2}$ Roman feet:—and these dimensions are so far inferior to those of the decidedly remaining *Prætorium*, in the castrum at *Richborough*; which castrum is so very nearly of the same dimensions with this, that I cannot have the least doubt to apprehend, that this *Prætorian* space at *Ardoch*, has most unquestionably been much reduced from its original extent, and no less altered in its external form.

Let us then see what will come out from the exact proportional distances, of the several gates of the camp, that may obviously be depended upon, as leading guides in our inquiry.

According to these, we may determine the situation of the *maniples* of the troops contained in this station, as follows.

Standing at the *Prætorium*, fronting the Decuman gate, on the right hand side of a way, 50 feet wide, there would be one beneath the other;—two *maniples* of *Triarii*, (t) (t) and two *maniples* of *Principes* (p) (p);—and a space next the rampart of 20 feet wide. And on the left, equally placed one beneath the other, would be two *maniples* of *Equites* (E) (E), and two *maniples* of *Hastati* (h) (h); then

* See before p. 96.

† See p. 71.

a street $17\frac{1}{4}$ feet wide; and then, two half maniples of *Allied foot*, (sp) (sp) one beneath the other;—and a space next the rampart, 20.

In other words, beginning at the north end of the castrum:

| | Roman Feet. |
|--|-------------------|
| A space next the rampart - - - - - | 20 |
| An half maniple of <i>Allied foot</i> (sp) - - - - - | 50 |
| A street - - - - - | $17\frac{1}{4}$ |
| A maniple of <i>Hastati</i> (h) - - - - - | 100 |
| A maniple of <i>Equites</i> (e) - - - - - | 100 |
| The main street - - - - - | 50 |
| A maniple of <i>Triarii</i> (t) - - - - - | 50 |
| A maniple of <i>Principes</i> (p) - - - - - | 100 |
| A space next the rampart - - - - - | 20 |
| | 507 $\frac{1}{4}$ |

And in depth, we shall have from the east side, where was the *Decuman gate*;

| | |
|---|---------|
| A space next the rampart - - - - - | 18 |
| The depth of the two ranges of the maniples of the <i>two Cohorts</i> - - - - - | 200 |
| And a <i>principal street</i> , of a little less breadth than at Richborough - - - - - | 30 |
| | 248—248 |

Which will bring us exactly to the front of the present remains of the *Prætorium*; and just to the west side of the *principal gates*.

And if we allow for a street close to the Western rampart, the same as that close to the Eastern rampart, of the breadth of - - - - -

| | |
|--|----|
| 18 | 18 |
| And a space, for four half maniples of <i>Allied foot</i> (sp . sp . sp . sp) placed, as in the plan, on each side the main street, and taking up in breadth - - - - - | 50 |

| | |
|---|----|
| And then a street behind the <i>Prætorium</i> , as usual, of the same breadth as that before it - - - - - | 30 |
|---|----|

| | |
|---|----|
| It will leave exactly, for the breadth of the original <i>Prætorium</i> - - - - - | 94 |
|---|----|

440

Further ;—with regard to the two sides of the *Prætorium* ;
 If we allow, on one side, for the breadth of the street next
 the *Northern* rampart, as before next the *Southern*, a space of 20
 And for an half maniple of Allied foot (sp) - - - 50
 And then for the maniple of Allied horse (SE) - - - 100
 And for a *Forum*, nearly the same as at *Richborough* - - - 55 $\frac{3}{4}$

225 $\frac{3}{4}$

And on the other side ;
 The same space, for the continuation of the street close
 to the *Southern* rampart, of - - - - - 20
 And for half a maniple of *Allied foot* (sp) - - - 50
 And a space for a *Quæstorium*, and Pay-office, (T), of nearly
 the same dimensions as at *Richborough* - - - - 47 $\frac{1}{2}$
 It will leave exactly, for the length of the original *Præ-*
torium - - - - - 164

507 $\frac{1}{4}$

And it is most remarkable, and no small evidence of the propriety, and truth, of all these conclusions, that a *Prætorium* of such dimensions as we find a space here left for, will very nearly accord, as that at *Richborough* did, with the $\frac{1}{15}$ th of a Consular *Prætorium* :* whilst, making the *Forum*, and *Quæstorium*, in this camp, of only somewhat less dimensions than at *Richborough*, might make this *Prætorium* even exactly accord with the $\frac{1}{15}$ th.

It has been observed that, most evidently, in order to allow the streets, close to the Ramparts, to be *as narrow* as possible, and that as many troops as could be, might encamp within these earthworks ; where there was not the advantage of high and strong walls, as at *Richborough*, *Burgh Castle*, and *Portchester*, that, in order to keep the enemy at such a distance as should hinder their missile weapons from doing much injury, there were no less than *six* deep fosses, and high ramparts, one behind another.

These extended no less than 300 English feet, on the north side ; —250 on the east ;—and about 190 on the south ;—whilst the river

* For $164 \times 94 = 15416$ square feet. And the $\frac{1}{15}$ th of a Consular *Prætorium* is 16000 square feet.

Knaig, even in its present state, would keep the enemy at the distance of near 300 English feet on the west.

Thus protected, therefore, there was no occasion for such extensively void spaces, next the ramparts, as in a Consular camp;—and the breadth, of 18, or 20 feet, was even more than sufficient for a passage way in this part; since we find, in truth, that in some of their considerable towns, and cities, in Italy itself, the breadth of $10\frac{1}{2}$ feet was thought quite enough for a *carriage way*.—This appears evidently, in the curious remains of the long buried *Pompeii*:*—where the carriage way remaining, still obviously worn by the tracks of wheels, was only about 10 feet 8 inches wide, in the principal street of entrance;—and the elevated foot way, on each side, only about 3 feet wide; making, in all, the width of the street to have been $16\frac{1}{2}$ feet.

In all these instances we have found, from the precise situation of the remaining gates, so obviously placed at unequal distances from the two ends of each side, (for the purpose of corresponding with the peculiar manner of placing the half maniple of *Triarii* in each Cohort, and for the purpose of making the principal street correspond with the middle of the front of a regular *Prætorium*), that *Legionary troops* were originally encamped here;—and so encamped, as to have their arrangement consistent with the very manner described by Polybius: although it may be true, that the peculiar distinction, by maniples, of *Triarii*, *Principes*, and *Hastati*, might have been very much laid aside, in the days of *Trajan*; and have even ceased in the later ages of the Roman empire;—and although it may be true, that in those later ages, a more lax mode of encamping, after what has been called the *Hyginian method*, might be adopted at these very *Stations*.

If, however, that was at any time the case, yet *that mode* is not, in these instances, worthy of our investigation;—as it was, according to General Roy's just observation concerning it, complicated, confused, uncertain, and variable;—and indeed the very best that could be said of such new mode was, that by the adopting of it sometimes, these stations might be made to hold a greater number of men.—The real matter of curiosity is, to perceive how exactly

* See Sir William Hamilton's very curious account. *Archæologia*, Vol. IV. p. 168.

the original plans of these great works, still appear to have corresponded with the very best plans made use of by the Romans, even under the *Scipios*;—and how peculiarly they were adapted for the reception of *Legionary Cohorts*.

There were however instances, in which the *Allied troops* belonging to one or two Cohorts, were unquestionably sometimes encamped *by themselves*;—in which case there would be no want of a regular *Prætorium*; and at most, only occasion for some allotment of space for a Forum, or market; at best, somewhat resembling the long narrow *Prætorium*, in an *Hyginian camp*.

One remarkable instance of this sort occurs amongst the *Castra* that have already been described.

It is that at *Birrens*, in Scotland,*—which having been probably one belonging to the army of *Agricola*, deserves on this occasion to be the more peculiarly referred to.

And if any one chooses to conclude, that even regular *Legionary troops* may have been encamped here, in the *Hyginian* method, it may be reasonably allowed;—but, without having recourse to that supposition, *Allied troops alone* may clearly have been encamped here, consistently with all that has been concluded from the accounts given by Polybius.

We find an area inclosed, (as represented in Pl. $\frac{xxviii}{2}$), after the same manner as at *Ardoch*, of about 445 English, or $460\frac{3}{4}$ Roman feet in length; by 320 English, or $331\frac{1}{2}$ Roman feet in breadth:—and we find this area still further lessened, by means of a raised bank, or terrace, next the rampart, of about 40 English feet, or $41\frac{1}{2}$ Roman feet in breadth on the two sides; and of about 60 English, or 62 Roman feet in breadth at the upper, or north end, still remaining so as to be clearly distinguished; and with an appearance that renders it probable, that it was continued on the fourth side;—or at least that some sort of way, of the same breadth, was originally levelled on the fourth side, next the river.

This second reduction of the area, leaves a space inclosed of only 385 English, or $398\frac{1}{2}$ Roman feet, from the north end of the *Castrum*, to the line drawn, for his section of the whole, by General Roy; and only 240 English, or about $248\frac{1}{2}$ Roman feet for the breadth of the *Castrum*.

* See page 71.

And it is further very remarkable here, that what I should call the *Decuman gate*, (d), is by no means placed nearer towards *one side* (as in the former instances), but is exactly in the middle of the north end of the camp; whilst the side, or *principal gates*, are at the distance of 310 English, or 321 Roman feet, (measuring close along the inside of the rampart); or at the distance of 250 English, or 259½ Roman feet, (measuring *within the bank*, or raised way) from the end where the *Decuman gate* (d) was situated;—and at the distance of 115 English, or 119 Roman from General Roy's line (ab).

Thus we have a clear space, in the front of the way that ran between the two side gates, extending 259½ Roman feet from the Decuman gate, for the placing of *maniples*.

And as on each side of that gate was 110 English, or 113½ Roman feet, there will be a space of 113½ Roman feet in breadth, and of 259½ Roman feet in depth, on each side, to be exactly accounted for.

Let any one then, according to all the principles hitherto admitted, from the accounts given us by Polybius, see,—*how* these two spaces could be filled up?—remembering that, besides all these measures, every gate, now still remaining, appears to be about 20 English, or 20½ Roman feet wide.

The method is obvious:—two *maniples*, either of *Allied horse*, or of *Allied foot*, on each side, might most conveniently have been placed here.

Whilst two other such *maniples*, might also have been placed, one on each side the main street, between this *principal street* of the principal gates, and what I call *General Roy's line* (ab);—leaving a breadth, to this street, of about 80 Roman feet, for any use, either as a parade, or a market;—and permitting the main street, running through the camp, from what answered to a Decuman gate, to be about 48 or near 50 Roman feet wide:—but here, it is obvious, would nevertheless be no room possible for any regular *Prætorium*; hardly even upon the *Hyginian plan*.

Of the same kind with this *Castrum*, and destined, in like manner, *only for auxiliary, or Allied troops*, seem to have been some others of those that have been delineated by General Roy, even of very

different magnitudes, though he himself, indeed, has not adverted to this particular destination of them.

To continue the tedious comparison, between the English and Roman feet, in any further detail, would be impertinent:—taking therefore the admeasurements, as nearly as possible, from *General Roy's measures*, of such *Castra* as he has described; either by reducing, in some instances, his given measures in English feet, to Roman; or by taking his measures, by his scales of Roman feet, (where he has given any such,) we have the following curious facts to reason upon, from the data afforded us in his many curious plates: whilst, for the better elucidation of the subject, I have collected together, in *one plate*, Pl. $\frac{xxviii}{6}$, and still upon the same scale with a *Circular camp*, all the representations of the proportions of the internal areas, of the *Castra* mentioned by General Roy, to which I mean to refer, upon the present occasion;—and have only to observe, that in this plate I take the clear mean *square measures*, each way, and do not pay any attentive regard to the rounding off of the corners of the *Castra*, both because such rounding off would be too minute, on these scales, to be of any consequence; and also, because all the reasoning upon these measures, is only more strongly confirmed, by allowing that such little further diminutions of the internal area, as the rounding of the corners would occasion, did exist.

The *Station*, near the camp at *Pickering Moor*, in Yorkshire, is perhaps one of the first that deserves to be named, as confirming the idea of *Auxiliary troops* being encamped, or stationed, distinct from *Legionary troops*, and by themselves.

It is, in its interior area, computed from General Roy's plan,* and represented Pl. $\frac{xxviii}{6}$, fig. 1, about 400 Roman feet, by 350; and is divided, *equally*, by what seems to have been the main street, from a *Decuman* to a *Prætorian gate*, into two parts, each of the breadth of 165 Roman feet; with a gate 20, or 20½ feet wide in the midst.

The other way it is divided, by what seem to have been *principal gates*, (now cut open to about 30 feet wide,) into two spaces, of 220 Roman feet one way, and of 156 Roman feet the other.

Now what could be done with such spaces?—On the side where

* See *Military Antiquities*, Pl. XI.

are 220 feet, might indeed be a space near the rampart of 20 feet, and then *two maniples*:—but in the space of 150 feet, on the other side, could not be room for a maniple and an half maniple; (because the placing of them, in that situation would leave no space at all next the rampart).—If however we conclude only one other maniple of 100 feet to have been placed on that side, then there might indeed be a way, as on the other side next the rampart, of 20 feet;—a maniple of 100;—and 30 feet to spare, to be added, to make the *principal street*, with the addition of the present gate, even 60 feet broad; but yet there would be no room, this way, for *any Prætorium*. Whilst if we take the measures in the other direction, there are indeed 165 Roman feet, on each side a way 20 feet wide;—and therefore, *possibly*, a maniple and an half, taking up 150 feet, might be encamped on each side, with a space of 15 feet left next the rampart:—but this would leave still less room for *a Prætorium*, than we found, on account of the disposition of the maniples, in the other direction; and the main street would be only of the width of 20 feet.

Thus however the camp might hold nine complete maniples of *Auxiliaries*, either horse or foot; or a due proportion of each, with their officers residing as usual in their respective maniples.

And if we allow only six maniples to have been encamped here, and by that means the main street, in the midst, to have been widened, as well as the two spaces next the ramparts, by leaving out the half maniples; there might be a space next each rampart of 20 feet, and the main street would be even 110 feet wide; making sufficient room in the centre, and in the two great cross streets, for any purpose of parade, or markets, that allied troops could possibly require;—(not only with full as much, but even with more convenience, than Legionary troops enjoyed);—but still with no adequate space either for placing a maniple of *Triarii*, or a regular *Prætorium*.

At *Line Kirk*, in *Tweedale*, just by the river *Line*, there is a *Castrum*, nearly of the same dimensions with those at *Richborough*, and at *Ardoch*, and having outworks to supply the want of high walls, much in the same manner as at *Ardoch*;*—and indeed a *Prætorium* might also possibly have been placed here, much in the

* See *Military Antiquities*, Pl. XXVIII.

same proportion, and with the same sort of arrangements round it, as at either of those places;—but two of the gates being *exactly in the middle* of two of the sides, it will, I believe, be found next to impossible, to have placed *Legionary troops* here, after *the Polybian manner*, or so as to have a proper situation for the *Triarii*, and proper streets.

This castrum is $569\frac{1}{2}$ Roman feet, by $476\frac{1}{4}$;—and its proportions, as divided by its remaining gates, are shewn, Pl. $\frac{xxviii}{6}$, fig. 2.

All its four gates are now about $20\frac{1}{2}$ Roman feet wide; and on each side of those at the east, and west ends, are $227\frac{3}{4}$, or 228 Roman feet;—so that here might be spaces left next each rampart of 18 feet; and *four entire maniples* might be placed, from north to south, two on each side a main street of more than 40 feet wide.

And the other way, where are 269 Roman feet on one side of the principal gates, and $279\frac{1}{2}$ on the other; might be placed, in depth from the east end, one such row of half maniples, and two such rows of whole maniples, before a principal street 82 feet wide; and two such rows of whole maniples might be placed behind it, with spaces next the ramparts both ways of $18\frac{1}{2}$ feet.

Eighteen entire maniples, therefore, of *Allied troops*, might be encamped here, even after the manner of Polybius; with these great streets dividing the whole, and affording spacious room, especially where they crossed each other in the midst, for a *market*, or *forum*; and for a *parade*; and for every necessary purpose.

And indeed, there would still be nearly the same kind of provision for these purposes, even if more space were allowed every where next the ramparts.—But for a regular arrangement of *Legionary troops*, I believe it will be found impossible to adapt either proper streets of division, or a *Prætorium*.

At *Hierna*, on the river *Ern*,* the gates are all found exactly in the middle of their respective sides; one now about 50 feet wide; and the other about 30;—both therefore somewhat widened or mutilated, though their situation is unquestionable.

The dimensions of the whole, in Roman feet, are given, Pl. $\frac{xxviii}{6}$.

There were $191\frac{1}{2}$ Roman feet, on each side of one gate, and 207 feet on each side of the other gate;—strange proportions of space! and which can scarcely be made to accord with any disposition of

* See Military Antiquities, Pl. XXXII.

maniples, according to the antient mode recorded by Polybius, except by concluding that, in this instance, as at *Birrens*, there was a more than usual large space, of about 40 or 50 feet, next the rampart; and, on that supposition, here might be the extent of a maniple and an half on each side of each gate; with the two cross streets in the midst, one of about 34 feet in breadth; and the other of about 88 feet;—or (if the spaces at two of the *ends* here, next the ramparts, were like one of those at *Birrens*, of 50 feet) then of about 65 feet in breadth.

Upon the whole, however, I should rather conclude, that the encampment here might rather have been even of Legionary troops, but only after the *Hyginian* method;—which a few words will explain, when we have finished the examination of the dimensions of a few more of General Roy's interesting plans.

At *Castle Dykes*, near *Carstairs*, upon the river *Clyde*, we have again a large *Castrum*, where one of the gates, (now 40 feet wide,) being placed exactly in the middle of one side, at the distance of 250 feet from each end, seems to indicate, that this also might be a station only for *Allied*, or *Auxiliary troops*.*

Its dimensions are about 590 Roman feet; by 540. And two of the gates are indeed so situated (as may be seen, fig. 4. Pl. $\frac{xxviii}{6}$), at the distance of 335 feet from one side, and of 230 from the other, that supposing one of them to have been a *Decuman gate*, and the street between them to have been the *main street*, and not the *principal street*, two Cohorts, with all their Allied foot, and half their Allied horse, might have been encamped here, in the Polybian manner; having a space of 30 feet wide left every where next the ramparts; and a *Prætorium* just about $\frac{1}{15}$ th of a Consular *Prætorium*; and a *Forum*, and *Quæstorium*, of the same magnitude as at *Richborough*, and *Ardoch*; to which *Castra* the dimensions of this bear a great similarity.

And in that case the maniples might have been placed thus,

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* See *Military Antiquities*, Pl. XXVII.

But, unfortunately, the street between these gates, appears to have been the regular continuation of a *Roman military way*; which might indeed have been admitted to run, as a *principal street*, through a *Castrum*, and to pass in the *front* of a *Prætorium*; but cannot well be admitted to have run as a *main street*, and to have passed *quite through* the middle of the *Prætorium*: and whoever tries the experiment, of endeavouring to place a *Polybian encampment* the contrary way, will find, as it appears to me, that by means of the situation of the gates, it cannot be done, except in a very awkward manner; and by leaving a great deal too much of void space next the ramparts; and without the possibility of finding sufficient space, either for a *Prætorium*, or *Forum*.

The fairest conclusion, therefore, seems to be, that here, as in the preceding instance, either troops were encamped after the *Hyginian manner*; or else, that only *Allied troops* were encamped here;—in which latter case, this *Castrum*, like the former, would hold 18 maniples; leaving a space every where next the ramparts of 35 feet; and two great cross streets each 70 feet broad; affording spacious room for a *Forum*, or market, and parade.

At *Fortingaul*, in *Glen Lyon*, we have obviously the curious instance, even of the encampment of *one single maniple*, or of 168 men.*

It is, within the ramparts, 140 Roman feet square. There was therefore a way, all round, of 20 feet:—and one of the gates (a), was just about the end of that way on one side;—and the other gate (b), very nearly so on the other.

The whole proportion is shewn, Pl. $\frac{xxviii}{o}$, fig. 5.

At *Kaims Castle*,* was a still smaller post, that would contain only about a quarter of a maniple, or about 40 or 50 men. It was manifestly an out-post belonging to *Ardoch*; and the contents of its area being about $77\frac{1}{2}$ Roman feet, by $68\frac{1}{4}$, six tents, for eight men each, of 25 feet by 12, might conveniently be placed, (two in a row) leaving a walk all round of $13\frac{1}{2}$ feet; and a passage, between the double and the single range, of about 4 or 5 feet, just as in the

* *Military Antiquities*, Pl. XIX. I mention these particular adjustments of these stations, because they have not been noticed by General Roy himself.

† *Military Antiquities*, Pl. XXXI.

case of the whole maniples.*—It is represented on the same scale with a Consular camp, Pl. $\frac{xxviii}{6}$, fig. 6.

A still more minute post, and on that account of exceeding great curiosity, and well defended by considerable surrounding outworks, is found on the east rampart of the very great Camp at *Ardoch*,† where it seems to have answered the double purpose, of having been a place for giving signals, to form a communication between the troops encamped at such a very remote distance,‡ as the furthest extreme part of that vast camp must have been; and also, of having been used afterwards as an *out post* to the *Castrum*, or Station, that has been described as the antient *Lindum*.

Whatever was its destination, it is a most curious circumstance, that its dimensions, within the ramparts, of about $36\frac{1}{2}$ Roman feet by 26 Roman feet, would, if clear, admit of just *two tents*, according to the measures assigned,—for *the eight men* in each tent,—for their arms,—and for their *bat horses*;—with a narrow passage round, besides the room of one foot always left for pitching them:§—and if, instead of allowing *two tents*, we take in the consideration of an apparent inclosure, or foundation of some building (probably of a square tower) at one corner; we shall find its square contents are about 10 feet, or a little more;—exactly the contents of a tent, for holding eight men.

In every light, therefore, in which this most curious minute remnant of Roman fortification can be considered, it appears most evidently to have contained just 16, or (allowing for a *watch*) about 20 men.

The clear area is represented, Pl. $\frac{xxviii}{6}$, fig. $\frac{7}{7}$, on the same scale with a Consular camp;—and with the little inclosure at one corner, on a larger scale, fig. $\frac{7}{2}$.

* See page 94, 95.

† See Military Antiquities, Pl. X. and Pl. XXXI.

‡ This camp was 2800 feet in length:—and we learn from *Hyginus*, that when a camp was longer than 2300, or 2400 feet, the ordinary signal, given by the *buccinum* at the front of the *Prætorium*, could with difficulty be heard at the *Decuman gate*;—and therefore a general charge was sounded, with all the martial instruments:—but even with that increase of sound, we may conceive the aid of such an intermediate post for signals to have been exceedingly useful. It is worth while, in the *Military Antiquities*, to compare p. 62, with p. 178.

§ See before, p. 94, 95.

These nice particularities may possibly appear a needless impertinent detail to some,—but surely, to the truly curious, it cannot be uninteresting, to consider, how exactly the dimensions of all these Roman remains, when thus examined, appear to agree with the ideas we are taught to entertain, from the accounts given us by *Polybius*; and from the attending to a *precise translation* of all his words.

It remains only to consider, shortly (and they surely of all others deserve to be somewhat considered,) *the Stations*, near the celebrated wall of *Antoninus*, now so commonly called *Grime's Dyke*.

Antient altars, and stones with Roman inscriptions of the most curious kinds, that have been dug up near these *Castra*, all concur to assure us, that these were truly Roman Stations;—and a *military way*, unquestionably still running either *through them*, or *by them* all, on the inner side of the great wall, attests the same fact.

Duntocher Station, was about 460 Roman feet, by 300.—Its great gate, now 30 feet wide, divided it on the south side into two equal parts, of 215 feet each, as is shewn in Pl. $\frac{\text{xxviii}}{6}$, fig. 8:—nothing therefore is more obvious, if we can suppose it possible that 10 or 15 feet should be sufficient for the breadth of a way round by the ramparts, than that *ten* maniples, or 1680 men, might be encamped here, with two cross streets, running transversely through the midst, of 30 feet in breadth:—or if such a narrow space next the ramparts is not to be admitted,—that six maniples, (or rather four maniples, and two half maniples) might be encamped here, with a space next the ramparts every where of 50 feet broad; and a main street, directly from the gate, of 50 feet broad; but without any cross street.—And indeed this latter disposition may, to some persons, seem most likely to have been the actual one; both because of its greater convenience, and also because, in truth, no remains of any side gates do appear.*

And this Station might thus contain either 1000 Auxiliaries of

* See *Military Antiquities*, Pl. XXXV.; where all these Stations, near the great wall of *Antoninus*, are exactly delineated.—Stations, near the wall of *that Antoninus*, who was so remarkable for maintaining, according to what was prophesied concerning his reign, (*Revelations*, chap. 6. ver. 5, 6.) peace and equity in all the Roman empire; and did so *here*;—and who put a stop to persecution against the Christians.

foot ;—or else a complete cohort, with its Allied foot, and some horse ;—in which latter case, the number stationed here would be only about 800.

At the distance of about 85 Roman feet from the wall or *Crime's Dyke*, and at the distance of 75 feet from the western rampart, within this *Station*, are the remains of the foundations of a building, about 75 feet by 55 ; and whose walls seem to have been about 5 or 6 feet in thickness.—It does not decidedly appear whether it was *Roman*, or of later ages ;—but it ought not to be passed by unnoticed, that its southern end would come exactly level with the north side of *that* which would have answered to a *principal street*, in case of ten maniples having been encamped here.—It by no means seems to have been a regular situation for an antient *Prætorium* ; but it might have been a tower in the later ages, for the chief Centurion of the whole band.

At *Castle Cary*, where the remains of a military way, about 20 feet wide, still runs through the whole ; and where the great, or *Decuman gate*, was exactly in the middle of its proper side ; and whose dimensions are given, Pl. $\frac{xxviii}{6}$, fig. 9 ; if we pursue the same train of ideas, we may perceive eight maniples, or 1344 men, might be stationed ; having a way, next the ramparts, of 17, or 20 feet ; and two great cross streets of 30 feet each. The dimensions within the ramparts are about 464 Roman feet, by 270.—217 on each side of what appears to have been a sort of *Decuman gate* : and on the sides of the military way, and *principal gates*, 80 feet next the old wall of *Antoninus* ; and 170 next the open country, and *Decuman gate*.

At *Kirkpatrick*, where a military way, now about 25 Roman feet wide, traverses the whole ; *ten maniples* again, or 1680 men, might upon these principles have been encamped ;—with a space left of 25 feet, next the ramparts, in every part ; and with two great cross streets, each of 35 feet in breadth.

The dimensions are given, Pl. $\frac{xxviii}{6}$, fig. 10 ;—485 Roman feet by 335 within the ramparts.—And, on the two sides of the Roman way and *Principal street*, 125 next the wall of *Antoninus*, and 185 next the open country ; towards which however no gate, at present, appears here.

Westerwood, Pl. $\frac{xxviii}{6}$, fig. 11, is a different sort of entrenchment ;

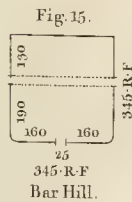
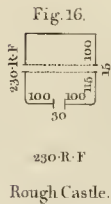
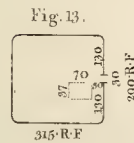
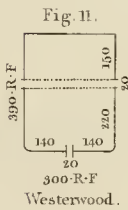
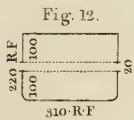
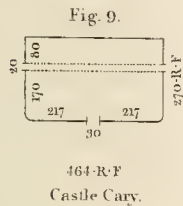
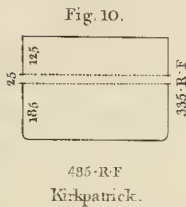
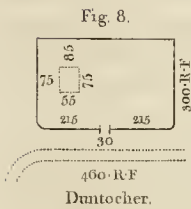
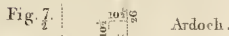
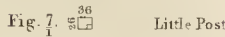
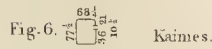
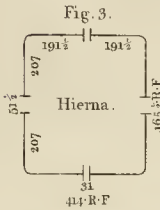
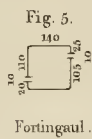
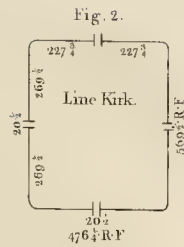
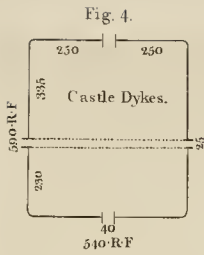
oblong the contrary way. It is about 300 Roman feet wide, having about 140 feet on each side the great Decuman gate;—and is about 390 in length from the wall of Antoninus;—having on each side of a military way that ran through its two principal gates, about 150 feet next the wall, and 220 next the great Decuman gate.—It would therefore conveniently contain six maniples, or 1008 men;—with a space every where next the ramparts of 20 Roman feet; and two cross streets; one, the principal street, 50 feet wide; and the other, the main street, 60 feet wide.

Castle Hill, Pl. $\frac{xxviii}{6}$, fig. 12;—310 Roman feet, by 220; had a military way, about 20 feet wide, running exactly through the midst of it, with 100 feet on either side; but with no appearance of any gate except the two principal ones.—Almost the only conclusion therefore which we can form, is, that it might contain six maniples, without any space left next the ramparts;—or else forces encamped after the Hyginian method, which seems rather to have been the case.

Kirkintilloch fort, now called *the Peel of Kirkintilloch*, Pl. $\frac{xxviii}{6}$, fig. 13, is of a different kind:—here was no military way passing through it, and here remains only one gate:—on each side this one gate of entrance, is 130 Roman feet clear; and the length of the whole area, from the gate, is about 310, or 315 feet. Two Legionary cohorts, or four maniples and two half maniples, amounting to 840 men, might therefore be stationed here; having a street of 30 feet in the midst; and a space of 30 feet every where next the ramparts.

In this fortress again, we have the remains of foundations of a building of 70 feet by 37, which may have been a tower.—And it is remarkable, that it stands exactly at the distance of 30 Roman feet from the rampart; and as exactly on the left hand of the gate; and therefore would be exactly fronting both the great street in the midst, and fronting the street next the rampart: a situation well adapted either for a chief captain of *Triarii*, or for any commanding *Centurion*, if the troops were encamped after the Hyginian method.

Achindavy, Pl. $\frac{xxviii}{6}$, fig. 14;—380 Roman feet by 335; with the military way passing exactly through the midst of it, now about 25



Comparative Dimensions of Roman Stations.

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feet in breadth, has 175 feet on one side of this way, and 135 on the other; and what seems to have been its Decuman gate exactly in the midst of its longest side, with 175 feet on each side this gate.—*Achindavy* might therefore contain seven maniples, or seven maniples and an half, or about 1176, or 1260 men, with a main street of 30, and a principal street of 35 Roman feet in breadth; and with a space left every where, next the rampart, of 25 feet;—but it seems most probable, that the order of encampment was *Hyginian*.

Bar Hill, Pl. $\frac{\text{xxviii}}{6}$, fig. 15, was a square of 345 Roman feet, with the military way running through, so as to have 190 feet on the one side, and 130 feet on the other; whilst what seems to have been its Decuman gate, now 25 feet wide, was in the midst, so as to have 160 feet on each side of it. But it is so very difficult to place regular maniples, with any degree of satisfaction, according to these divisions, that we must be led to conclude the adjustment of the arrangement of troops, in this station, to have been upon a different principle from the *Polybian*.

And the same may still more strongly be said of *Rough Castle*; Pl. $\frac{\text{xxviii}}{6}$, fig. 16;—230 Roman feet square;—with the military way running through it, having 115 Roman feet on one side, and 100 on the other;—whilst there are 100 feet on each side of its apparently Decuman gate.

It is needful then, after all these observations, just to add, as far as is possible, a short and comprehensive idea of what was the *Hyginian mode*.

Its characteristic difference from the *Polybian*, consisted in this;—that the troops, instead of being divided into *Maniples*, were divided into what were called *Centuries*; though consisting only of 80 men each:—and that a *Cohort* was then made to consist of *six Centuries*, or of 480 men.

And that, with regard to the order of encampment, they were placed, (allowing 8 men to a tent,) each Century in a row of ten tents; extending 120 Roman feet in length, and 24 in breadth; see Pl. $\frac{\text{xxviii}}{7}$, fig. 1;—though usually, of the ten tents, only eight were really pitched, (because of the regular number of soldiers who must always be necessarily employed, on watch and duty,) by which means more space was allowed near the tents of the officers.

That two of these rows, placed back to back, so as to have their bat horses eat out of the same manger, or from off the same spot, formed what was called a *Striga*, of 120 feet in length, and 48 feet in breadth; to which was allowed an additional space of 12 feet, and no more, to separate it from the next *Striga*, as it had, on its other front, the benefit of the street of a neighbouring *Striga*; by which means each complete single *Striga* was 120 feet long, and 60 broad. See Pl. $\frac{xxviii}{7}$, fig. 2.

And as to these distinct *Strigæ*;—that they were placed in very different positions, in different camps, and stations, just as the whole allotted space best admitted:—only in this mode of encamping, (contrary to the Polybian mode,) the *Legionary troops* were generally placed next the rampart.

A further difference, in an *Hyginian Camp* was, with regard to the *Prætorium*, *Forum*, and *Quæstorium*,—in that they were upon quite a different plan from the *Polybian*:—the *Prætorium*, quite in the midst of the camp, long and narrow; with the *Forum* just below it; and the *Quæstorium* beyond the *Forum*;—and all three forming as it were rather parts of one great street, than separate *places*; whilst the *main street*, and the *principal street*, were usually in other parts, both of them of one and the same breadth.

A complete *Imperial army*, in the time of *Hyginus*, consisted of three Legions; instead of consisting of only two Legions, as was the case with a *Consular army*, in the time of *Polybius*;—and, on this account the great exemplar of an *Hyginian camp*, was divided into three distinct parts, called the *Prætentura*, *Latere Prætorii*, and the *Retentura*;—or as we might perhaps call them in modern times, a *van-guard*, *Prætorian wings*, or *body-guard*, and a *rear-guard*; and an *Hyginian camp*, in the great pattern, and in the lesser imitations, was usually one-third longer than it was broad.

Hyginus assigns 2400 feet for the length, and 1600 feet for the breadth of an *Imperial camp*;—but gives a sort of plan, containing the dimensions of one of 2310, by 1620.

It is to be remarked also, as a further distinction, that in *Imperial armies*, such as are described by *Hyginus*, larger bodies in proportion of *Allied troops*, or *mercenaries*, were attached to the Legions:—and that these mercenaries were usually placed, near the two extremes

of the camp, immediately within that line of Legionary *Strigæ*, either double, or single, that (as has been mentioned) ran quite round an *Hyginian* camp, separated from the ramparts, by a broad way, and from all the inclosed troops, by a continued narrow street, called the *Sagular street*.*

And, on this occasion it ought not to be passed by unnoticed, that *Hyginus*† says expressly, that THE DECUMAN GATE *was so called from the tenth Cohort of the Legion being encamped near it*;—and that this assertion of his in reality confirms, still more strongly, all the conclusions that have been formed concerning the real situation of *that great entrance*, in the preceding pages;‡—though *General Roy*, misled by the passage in *Livy*, in the manner that has been there explained, ventures to suppose, that even *Hyginus* himself was mistaken.§

It would be very strange indeed, however, if the very writer who undertakes to describe this mode of Castrametation, living under the Emperors *Trajan*, and *Adrian*, when it was actually in use, should be so mistaken:—I shall therefore have no hesitation to follow *his own* authority; and to replace the *Hyginian Decuman gate* where *Hyginus* himself placed it, in perfect conformity to the *Polybian Decuman gate*.

The whole of what has been said may best be explained by a Plan, P. $\frac{\text{xxviii}}{7}$, fig. 3; leaving out any precise mode of arranging the *Strigæ*, within the several great divisions;—which might so easily be varied at pleasure;—and was indeed so often actually varied.—A circumstance wherein consisted, truly, the great advantage of this mode of encamping;—although it unavoidably occasioned somewhat of confusion in the order of the camps themselves, and much more in the description of them.

But before we refer to the Plan, it ought to be mentioned further, that in this mode of encamping, the *Sacellum*, *Tribunal*, and *Auguratory*, seem always to have been placed in the front end of the *Prætorium*;—and that the crossing of the *main street* and *principal*

* These facts are all collected from the account of *Hyginus*, as explained by *Schelius*, in as perfect conformity as possible with the account given by *General Roy*, from p. 176, to p. 189, of the *Military Antiquities*. † See *Military Antiquities*, p. 179.

‡ See p. 12, 13.

§ See *Military Antiquities*, p. 179.

street just before these, was called *Groma*;*—being *that spot* from whence all the measures for marking out the camp were begun.

That *the Prætorium* itself, was no less than 720 feet long; and at least 180, and sometimes 220 feet broad.†

And that the manner of *dividing* an *Hyginian* camp, always varied according to the proportion of the number of *Legionaries* to that of the *Auxiliaries*;—because, when the latter was small in proportion, the *Sagular street* became removed more inward from the rampart, and nearer to the *Prætorium*.

In our Plan, Pl. ^{xxviii}/₇, fig. 3, the whole camp is made 2400 Roman feet long, by 1600 feet broad; according to the measure first assigned by Hyginus.

(aaaaaaa) Marks the way, or space next the rampart, 60 feet broad.

(bbbbbb) The *Legionary Strigæ*; double in an *Imperial* camp; and sometimes single in a smaller camp; and sometimes in a much broader row than double; when there were but few auxiliaries, accompanying the force;—but always so placed as to have convenient ways for marching out to the ramparts on one side, and to the *Sagular street* on the other.

(sssssss) The *Sagular street* 30 feet broad.

D. The *Decuman gate*.

(dd) The *main street*, leading from *the Decuman gate* to the *Prætorium*;—60 feet wide.

(pp) The two *principal gates*.

And (oooo) the *principal street*, 60 feet wide.

(rrrr) *The Prætorium*; 720 feet by 220. In the upper part of which, fronting the *Principal street*, were the *Great Offices*, and the

* *Groma*, it is well known, means a measuring instrument.

† It surely deserves notice, that these measures agree, in the square contents of the whole area, very nearly with those of a *Polybian Prætorium*, of 400 feet square; according to the mode of translating the words of *Polybius* in the preceding pages:

$$\text{for } 400 \times 400 = 160000 \text{ square feet;}$$

$$\text{and } 720 \times 220 = 158400 \text{ square feet;}$$

and the difference is only 1600 square feet;

a difference of not quite two feet each way; which is a strong attestation to the truth of all the conclusions that have been formed in these pages. See p. 81, 82, 83, 100, 115, 123.

Tribunal; whilst the lower part of it seems, in this mode of encamping, to have been deemed sufficient for all the purposes of a *Forum*;—in which respect, as in many others, the *Hyginian Camp* had less spare room, and less convenient space, than the *Polybian*;—though it was contrived to hold more troops.

And it ought to be observed, that, in smaller camps, there is every reason to believe the extent of the *Prætorium* was always nicely adjusted to the number of *Cohorts*, and force encamped, nearly in the same proportions as in the case of the adjustment of a *Polybian Prætorium*.

(qqqq) The *Quintan street*;—30 feet broad; which sometimes had gates at its ends; but most usually had none.

(rr) The Pay-office, or *Quæstorium*:—where, as in this kind of camp there was less space for the *Quæstor's* use near the *Decuman* gate, there was more room here, near the *Prætorium*, than in a *Polybian* camp.

(d2 . d2) The continuance of the main street to the *Prætorium* gate (p).

1, 2, 3, 4, 5, 6. Great divisions, for the encamping of the few remaining *Strigæ* of the *Legionaries*; and for all the *Auxiliaries* or *Allied troops*, with the *Prætorian guards*, horse, and foot; and with the *Evocati*, or volunteers, on each side of the *Prætorium*:—all which *Strigæ* of tents were, in different instances, disposed variously; whence again arises confusion, in the accounts of this kind of castrametation.

(llll) Tents *occasionally* for Legates.

(tttt) Tents as usual for Tribunes.

Such was the *Hyginian Camp*;—but after all, *Hyginus*, in comparison of *Polybius*, is a very confused writer,—however he might, in his day, be a good *Cromaticus*, or measurer. And the confusion of the mode of encamping in the later period of the Roman empire, became every age so much worse and worse, that when *Vegetius* wrote, in the fourth century, he complained, that the custom of *fortifying a camp regularly*, was not only laid aside; but the very method of doing it was entirely lost:—which was one cause of the fatal disgrace that then so often befel the Roman armies.*

* *Military Antiquities*, p. 189.

It ought now, perhaps, before we entirely leave the consideration of the adjustment of the *particular bands* of encamped troops, to the precise measures of *Roman Castra* great and small which we are acquainted with, to be shortly remarked, that the great Castrum at *Castor*, in Norfolk, agrees in its dimensions even better with a truly antient *Polybian* mode of encampment, than with the *Hyginian* mode.

For if we take the dimensions, within the walls, to have been, as mentioned in the preceding pages,* 1080 English feet, by 1320;—these reduced to Roman measure, will amount to about 1118½ Roman feet, by 1366½. And in this space, either an *entire Legion*, with at least half of its *Allies*;—or *half a Legion*, with double the number of its *Allies*; might be encamped in the most complete manner.

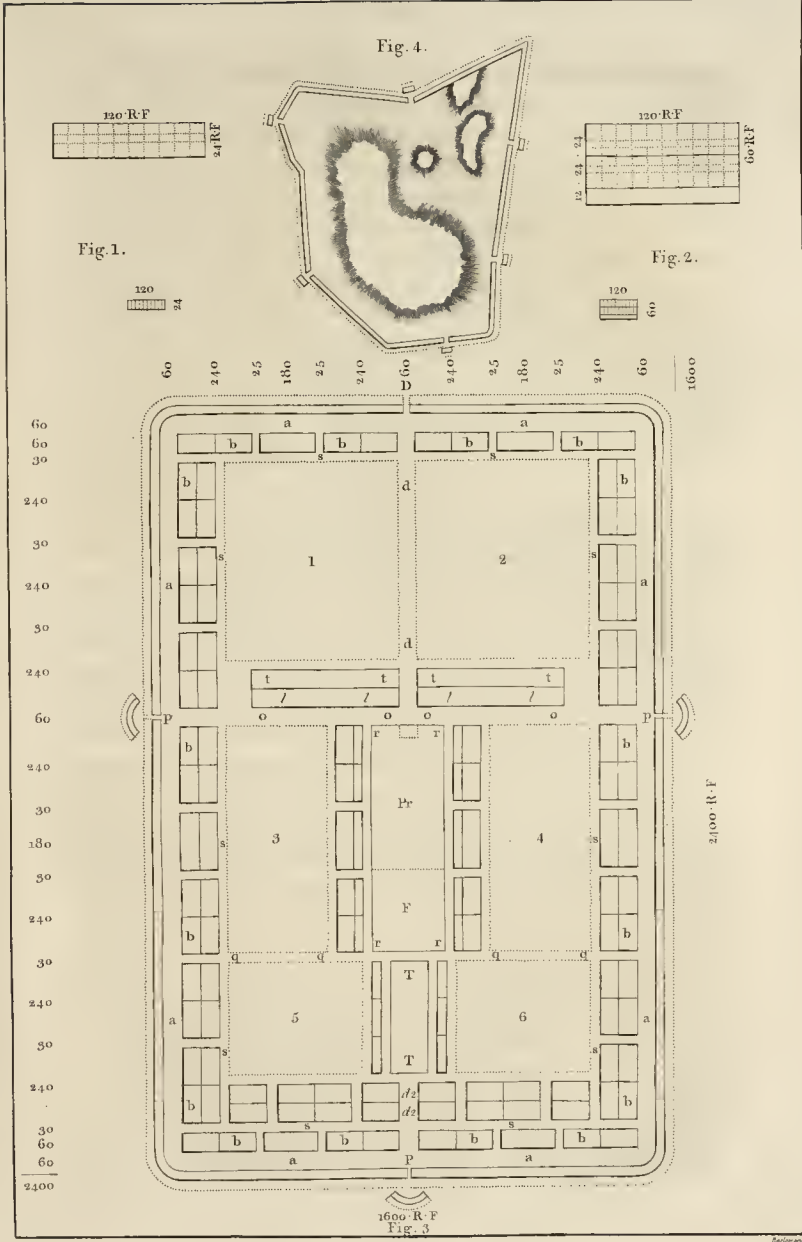
In the first instance;—the front, next the Decuman gate, might be arranged as follows;—not requiring so great a space to be left next the rampart, in this great Castrum, (which like Richborough had high and great walls,) as in a camp where there were mere earthworks.

| | | | | | | | | | | | | |
|------------------|-----------------|-------------------|-----------|-----------------|-----------------|------------------|-----------------|-----------------|-----------|-------------------|-----------------|------------------|
| Space next wall. | <i>Hastati.</i> | <i>Principes.</i> | A street. | <i>Triarii.</i> | <i>Equites.</i> | The main street. | <i>Equites.</i> | <i>Triarii.</i> | A street. | <i>Principes.</i> | <i>Hastati.</i> | Space next wall. |
| 134 | + 100 | + 100 | + 50 | + 50 | + 100 | + 50 | + 100 | + 50 | + 50 | + 100 | + 100 | + 134 |
| | | | | | | | | | | | | = 1118. |

And, thus *two complete Cohorts* with all their *Equites*, might stand in a line;—and, in depth, five rows of these would contain an whole Legion.

| | |
|---|-------------|
| | Roman Feet. |
| And allowing for a space next the rampart, the other way | 133 |
| And for the depth of these five rows of double Cohorts, | 500 |
| And for a principal street, - - - - | 50 |
| And for a Prætorium, of half the dimensions of a Consular Prætorium; <i>i. e.</i> of 400 feet by 200, - - | 400 |
| And for a street behind the Prætorium, - - - | 50 |
| And for a row of eight maniples of <i>Allies</i> , - - - | 100 |
| And for a space next the Prætorian rampart, or wall, | 133 |
| The whole will amount exactly to - - - | 1366 |

* Page 49.





Whilst it is obvious, that on each side a *Prætorium* of 200 feet in breadth, might be very good room for a *Forum*, of due proportion, on one side;—for a *Quæstorium*, on the other;—and for four maniples, and four half maniples, to be placed beyond the *Forum*, next the wall; and the like number beyond the *Quæstorium*;—making, with the former eight, the whole number exactly twenty maniples, in this part:—a number that would contain, most precisely, half the number of *Allied forces* belonging to a Legion.

In the latter instance, of containing *half a Legion*, with double the number of *Allies*;—the only difference would be, the ranging the mere *proper* number of *Allies* of each Cohort, on the left hand of it, and of the front of the *Prætorium*, in their four maniples;—which if their maniples were made double, without an intervening street, (as in General Roy's Consular camp) would require no alteration of space whatever next the wall.

And even if a street were allowed in the midst of them, would only require the way, by the wall, to be 25 feet narrower; or not more than about 105 feet in breadth; which would still be more than quite sufficient.

If we take Mr. Wilkins's measures, of 1120, by 1349 English feet, that have been referred to* as being those of the outside of the Vallum, to have been rather those within, more accurately ascertained than by the former measurement;—these will amount to about 1159½ Roman feet, by 1396¾;—and the only difference this will make is, that there might be 150, or 155 feet, for space to be left next the wall:—whilst, either way, the adjustment of the order of encampment *here* will be the same; and obviously upon the *Polybian* plan;—and for the containing a force of about 6480, or at least of 6210 men.+

* Page 51.

| | |
|--|------|
| + In the time of the <i>Scipios</i> , a complete Legion, with its <i>Equites</i> , seems to have contained | 4500 |
| A full Legion, with all its <i>Allies</i> , horse and foot, contained | 8460 |
| A weak Legion, or one with half its <i>Allies</i> , contained | 6480 |
| A strong half Legion, with double its usual number of <i>Allies</i> , contained | 6210 |

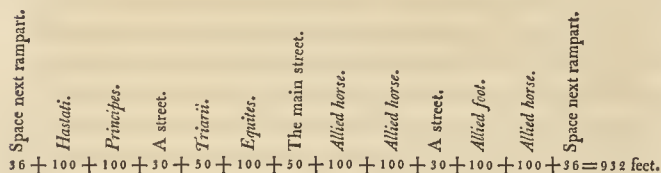
See p. 107.—The first deviation from this proportion, in subsequent times, seems merely to have been, the adding to each maniple, such a number of soldiers as might be supposed to be constantly absent from the tents on *watch*, and *ward*:—and the inconvenience sometimes

Chesterford, in Essex, which appeared to me as of a more square form than it has usually been taken to be, was considerably larger; and seems intended to have contained an *entire Legion*, with all its Allies;—and there also enough may be traced, to perceive, that the encampment was consistent with *Polybian* rules.

And *Sodbury*, in Gloucestershire, of which Mr. *Lysons* has given us a very curious representation in his most valuable work;*—seems to have been incomparably well adapted to have contained *three Cohorts*, with double the number of *Allied foot*, and half as many more *Allied horse*, encamped exactly after the *Polybian* method.

According to Mr. *Lysons*' plan, it was about 300 yards in length, from north to south; and 200 yards in breadth, from east to west:—that is about $931\frac{3}{4}$, or 932 Roman feet, by $621\frac{1}{4}$, or 622:—and *that* which appears to have been the *great Decuman gate*, was not exactly in the midst of the east side; but about 50 feet nearer to the north, than to the south.

A full Cohort might therefore be arranged, in a line, fronting the Decuman gate, exactly according to *Polybian* rules, in this manner.



And *three Cohorts in depth* from the gate, might be placed *before* the Prætorium.

Whilst *eight half maniples* of *Allied foot* might be placed *behind* it.

And two more maniples of *Allied foot*, with three maniples of *Allied horse*, might be placed on the sides of the Prætorium; leaving room for a *Forum*, of 90 feet;—a *Quæstorium*, of 40 feet wide;—and a *Prætorium* of 230 Roman feet, by 100, just a little larger than

arising from this addition, by means of wounded men, or sickness, probably next introduced the new and subsequent division of Cohorts into Centuries, such as are described by Hyginus.

* *Lysons*' Woodchester, Pl. I.

$\frac{1}{7}$ th of a *Consular Prætorium**, which it ought precisely to be for *three Cohorts*.

All these maniples disposed of about the *Prætorium*, would amount to six maniples of Allied foot, and three of horse; that is, to as many more Allied foot as properly belonged to the *three Cohorts*, and to half as many more Allied horse;—a very adequate addition to attend as Extraordinaries, and as a select guard, for the Commander in Chief.

On each side the *Prætorium*, the disposition of the whole would be thus,

| | | | | | | | | | |
|---------------------|--------------|---------------|----------|------------------------|------------------------------------|---------------|---------------|--------------|---------------------|
| Space next rampart. | Allied foot. | Allied horse. | A Forum. | The <i>Prætorium</i> . | A <i>Quæstorium</i> , or treasury. | Allied horse. | Allied horse. | Allied foot. | Space next rampart. |
| 36 | + 100 | + 100 | + 90 | + 230 | + 40 | + 100 | + 100 | + 100 | + 36 |
| = 932 feet. | | | | | | | | | |

And in depth, from the *Decuman gate*, the camp would be filled up by

| | Roman feet. |
|---|-------------|
| A space next the rampart | 36 |
| Three full Cohorts | 300 |
| The <i>Principal street</i> | 50 |
| The <i>Prætorium</i> | 100 |
| A street behind the <i>Prætorium</i> | 50 |
| Eight half maniples of <i>Allied foot</i> | 50 |
| A space next the rampart | 36 |
| | 622 |

Whilst the whole force, consisting of about 3636 men, would be arranged thus:

| | | | | | |
|---|---|------------------|---|---------|---------|
| | v | | v | | v |
| h . p | | t . E | | SE . SE | SP . SP |
| h . p | | t . E | | SE . SE | SP . SP |
| h . p | | t . E | | SE . SE | SP . SP |
| sp . SE | F | <i>Prætorium</i> | T . SE . SE | SE . SP | |
| $\frac{1}{2}$ sp . $\frac{1}{2}$ sp . $\frac{1}{2}$ sp . $\frac{1}{2}$ sp | | | $\frac{1}{2}$ sp . $\frac{1}{2}$ sp . $\frac{1}{2}$ sp . $\frac{1}{2}$ sp | | |

* For $230 \times 100 = 23000$; and the $\frac{1}{7}$ th of a *Consular Prætorium* is $\frac{160000}{7} = 22857\frac{1}{7}$ feet.

and would consist of

| | | | | |
|---|---|---|---|-------|
| Three <i>full Cohorts</i> , with their horse | - | - | - | 1350 |
| Their <i>Allied foot</i> | - | - | - | 1008 |
| Their <i>Allied horse</i> | - | - | - | 180 |
| As many more <i>Allied foot</i> , encamped as a sort of <i>Extraor-</i> <i>dinaries</i> , about the <i>Prætorium</i> | - | - | - | 1008 |
| Half as many more <i>Allied horse</i> , as a <i>select guard</i> | - | - | - | 90 |
| | | | | <hr/> |
| | | | | 3636 |

There cannot, however, remain a doubt but that, in the *later* ages, even in all these camps, and *Castra*, great and small, the *Hyginian* method was sometimes used;—or that, at last, those which had *walls* even became a sort of mere towns; with little or no method of arrangement, either after the *Polybian*, or any other regular mode: neither can there be a doubt, but that the *Hyginian* method was commonly used, in all such Stations as had been originally *British posts*;—or such as were (like *Pevensy*) of irregular form;—because this mode of castrametation might indeed be adapted to a fortified inclosure of any figure in its outline whatever.

A variety of other instances, besides those already given, might be produced, to shew the general uniform plan, and contrivance, even of all those Roman *Camps* that were *mere earthworks*; as well as of their regular *Stations*, and walled *Castra*; but a further enumeration would be tedious, as well as useless.

It now then only remains, to produce a few other instances, besides that of *Pevensy*, wherein, on account of the uncommon obvious advantage of the ground, the Romans sometimes, in their mere *Castra*, and *Stations*, or in such as afterwards became *Towns*, and *Cities*, departed from the more usual regularity of their square, (or *oblong squarish*) form of castrametation.

And amongst these it is impossible to forget a place of so great distinction, as the antient *Verolanium*, or *Verulam*.

First, a great *Roman station*; and then a distinguished Roman town, or city.

A plan of it, upon a small reduced scale, for the sake of comparing it the better with *Pevensy*, and *Silchester*, (which are added, in like manner, on small scales,) is given in Pl. XXVIII. fig. 9; from

the larger plan, published in the *Vetusta Monumenta*,* as taken by Dr. Stukeley.

This most remarkable, and most irregular antient station, is situated on a sloping tract of ground, between the *Walling-street* road, on the south-west, and the river *Colne*, or *Ver*, on the north-east, (ccc); where there is much reason to think, there was from the very first a great extent of marsh, or even of water;† and this may indeed originally have been the very inducement for adopting the strange peculiarity of its form here found.

Yet here we find the other important points of Roman Castrametation to have been attended to.

For, on the two sides, appear plainly to have been the two that were called usually *principal gates* (oo); at (d) appears to have been the *Decuman* gate;—at (p) the *Prætorian* gate; and 'at (P) the *Prætorium* itself: (as at *Richborough*, at *Melandra*, and at *Ardoch*.) much nearer to the *Prætorian* gate, than to the *Decuman*; so that the street, from the one side *Principal gate* to the other, might pass *before* the front of the *Prætorium*, and *between it, and the Decuman gate*.

This spot, like the *Prætorium* in some other *Stations*, has also throughout all succeeding ages, been rendered very remarkable, by continued devotional attention.—For here, as at *Richborough*, *Portchester*, and *Castor*, a Christian church has been built, near the site where there is every reason to believe stood the antient *Sacellum* of the *Prætorium*:‡ the piety of early ages endeavouring to change corrupt devotion into true religion; though the attempt too often

* Vol. I. Pl. VIII. † It seems from antient records, (for the combined testimony of which, for brevity sake, I shall refer to *Gough's Camden*, where, from the authority of *Mathew Paris*, they are very well collected, in a summary manner, into one point of view;) that there was really a *piece of water*, which antiently surrounded the greatest part of the city of *Verulamium*: and that the last remains of it were, a great fish pool; so near, and so hurtful to the church of *St. Albans*, that Abbot *Alfric*, in the reign of Henry the Third, bought the right to it, and drained off the water, in such a manner, that the nuisance was effectually removed. See *Gough's Camden*, Vol. I. p. 333. *Mathew Paris*, *Vitæ Abb.* p. 40, 41.

‡ It may perhaps with great propriety be brought to remembrance, on this occasion, that the first cathedral of *St. Paul's*, in London, was also built nearly on the spot where must have been the *Roman Prætorian camp*;—and that this has continued to be the situation of all the there succeeding venerable metropolitan fabricks to this time. See the *Parentalia*, p. 271.

corrupted real religion itself.—And in this church, (which is called that of *St. Michael*) have by a strange concurrence of circumstances been deposited, in still more modern days, as if to mark the dignity of the spot, the remains of the great *Lord Bacon*;—that truly illustrious ornament of the literary world; and father of the restoration of true philosophical science in this country.*

The walls of *Verulam* were defended, in some parts, by a double fosse; but in others by a very deep single one; and, as to their structure, bore a strict conformity to those of Richborough, and Pevensey.

They were composed of *alternate rows*, (or *Θεμισια*) of bricks, and of flints; varying a little in the dimensions and position, *here*, as elsewhere in the other Roman works.—Four distinct layers were discernible in some parts of the walls, as they remained in 1768. Of these, the lowest course of bricks had four rows; the next three; and the two uppermost had each of them two; and the courses of flints and mortar between them, were each about two feet and eight inches in breadth.†

The bricks were an inch and an half, or an inch and a quarter thick; and had such a quantity of mortar between each row, as to be nearly equal in thickness to that of the bricks themselves.—They were also of different lengths:—some twelve; some sixteen; and some eighteen inches. And there has already been mentioned, in these pages, *one* brought from *Verulam*, (that was wrought up in the walls of the abbey church at *St. Alban's*,) which was near two feet;‡ in which irregularities they most perfectly agree with all other truly Roman buildings.

* The tomb, or perhaps rather monument, of this Great Man, which is very simple and plain, is yet one of the very finest pieces of sculpture in England, and too little known.—It represents him resting his head upon his arm, in his elbow chair, in sad composed sleep;—the too just, and almost prophetick emblem, of that deadly sleep, with which mankind, in general, have been too ready to forget, and to neglect, the best intimations in his writings.

† See a representation of a part of the wall in the *Archæologia*, Vol. II. p. 184.

‡ See in this Volume, p. 8. We have a very curious account of what was found on taking down, and removing many of the ruins of old *Verulam*, by the Abbots *Ealdred*, and *Eadmer*, about A. D. 960, (written by *Matthew Paris*, about A. D. 1250,) in which one

A considerable fragment of the wall remains, near the side of one principal gate, towards the north-west, at (s);—and from the

scarcely knows whether most to admire, the great curiosity of the articles said to be discovered, or the gross ignorance of the discoverers, and then resident monks.

Besides bricks and tiles of all dimensions, taken to be worked up in the new building of the church of St. Albans,—and many fragments of stone columns,—they found about the middle of the city, (and evidently about the spot where must first have been the ancient Roman Prætorium,) the remains of a sort of palace:—and in a recess of the wall of this palace, forming a sort of closet or cupboard, several books, some of which plainly appear, by the substance of the account, to have been rolled up in scrolls, like the most ancient books of Rome; and some to have consisted of flat leaves, inclosed between oaken boards, and tied with bands of silk. —Some of them were said to have been in unknown characters; which we may therefore very fairly conclude to have been written in Greek;—and others appear to have been in the British language, for which at last they found a decypherer, an old decrepit priest, who made it out to be a life of St. Alban in the British language. And on this occasion, surely, even with regard to the supposed unknown character of these manuscripts, it may not be amiss to recall to mind, that Cæsar intimates (De Bello Gallico, lib. vi. sec. 13.) that the Britons actually made use of Greek characters, in writing their own language.—Others of the manuscripts were in Latin:—and the author speaks of their discovering invocations to Phœbus, in a manner that leads one shrewdly to suspect, that these pious monks mistook some of the odes of Horace, or the verses of some other Latin poet, for forms of devotion, or Pagan breviaries. Matthew Paris, Vita Abbatum, fol. 40, 41.

The account of the old arches, and caverns, in which thieves and banditti concealed themselves, is also curious: and no less so is that of the discovering the remains of tarred boards, naval tackle, and anchors; the remains of boats, which might have been brought to the great pool near the wall;—but as to the discovery of such shells, as were supposed to indicate that the sea ever approached those walls, that conclusion seems merely to have arisen from the mistake they were led into, by the discovery of antediluvian fossil shells, which might unquestionably be found on digging there, as such may still be found in so many other places; and have often led antiquaries, much better informed than they could be in Abbot Eadmer's days, into the same sort of mistake:—a mistake which ought ever to be guarded against.

Of the fluctuating mutability of scenery on the face of the earth, there cannot be a stronger proof than on this spot.

Here once stood for ages, in thick impenetrable woods, protected by a wild morass, a British town.

Here stood, next, a Roman *Castrum*:—and after that, from about A. D. 150 to 450, for near three hundred years, a flourishing Roman town, or city, with the morass turned into a fine lake for boats and vessels.

Here remained the wide extended rugged ruins of that town, become mere objects of antiquarian research (if there had been intelligent antiquaries in those days), with the lake become a rude sedgey fishery; and the vaults and passages, dens of thieves and robbers, for above three hundred years more;—to the year 900.

Here, in its near neighbourhood, then reared its head, a proud glorious abbey;—with the

examination of several parts, the walls appear to have been about 12 feet thick.*

Another remarkable instance, wherein the Romans departed from their usual regularity of form, in the construction of their *Castra*, is to be found in a place which became, at length, no less than *Verulam*, a regular Town of great note, and importance; and of the walls of which there are still considerable remains.

This is *Silchester*, in Hampshire; of which a plan, on a reduced scale, is added in the comparative Plate of Roman fortresses, fig. 10, Pl. XXVIII.

The wall, more irregular than Pevensey, consists of no less than nine unequal sides;—in some parts near 20 feet high; and 12, or even 14, or 15 feet thick.

It is constructed, as in other instances of Roman works, of *alternate courses* (or *Θεμελιαξ*);—but here, (the country affording a proper material near at hand,) instead of bricks, the alternate rows, between the courses of flints and rude pebble stones, are formed of broad flag-stones, which answer precisely the same end.

In some parts have been found work in *herring-bone* fashion:—but this may here, as well as at Pevensey, be justly suspected to have been merely the consequence of *British repairs*, after the departure of the Romans; or else of *very early* Saxon repairs.†

It is agreed by almost all antiquaries,‡ that there was originally a *British* town here, called *Caer Segont*, or the city of the *Segontiaci*; and the irregular form, and predetermined figure of this important

adjacent lake converted into a fertile mead.—An abbey which, for ages, continued one of the most magnificent objects in this island.

All this passed long before Humphry Duke of Gloucester was born.—And *here now* lie entombed, in his deep dark vault, the mouldering remains of that good Prince, which can scarcely be said to rest, but have for many years been exposed to the curiosity of strangers, as a sad interesting memorial of nearly forgotten *days*, and *times*;—whilst the mouldering abbey itself is scarcely preserved, by being converted into a parish church; and the spot where *Verulam* stood, has been unremittingly ploughed up, as a field of corn.

* See many curious observations concerning them in Pennant's Journey from Chester, p. 251.

† See p. 42, 43, in this Volume.

‡ Camden, Vol. I. p. 121. Gough's edit. That this city was destroyed, and neglected before the establishment of the Saxon monarchy, seems obvious; because, although such numbers of Roman, and even some British coins, have been dug up here; yet it appears, from the account of the most intelligent persons near the spot, that no Saxon or Danish coins have been ever found in this place.

place, was probably the circumstance that induced the Romans to forego their adherence to their more regular plan:—just as they did at *Byzantium*, or *Constantinople* itself, which was made the seat of empire, only a few years before the building of the walls of *Silchester*.*

In other respects, the Romans at *Silchester*, as at *Verulam*, observed their usual rules.—There were clearly two side, or *principal gates* (oo); designed in a distinguished manner to answer, like those in a *Castrum*, to a *principal street*: and there was a *Prætorium*, at (p), including a smaller space;—sometimes supposed to have been a *Forum*; but which we may more justly conclude, to have been the *Augurale*;—wherein, (in conformity to this conclusion,) have been discovered, foundations of a building of freestone; the walls of which were 3 feet thick; and which appears to have been the very *Sacellum* of the *Prætorium*; as the foundation of an altar, 3 feet by 4, and 3 feet high,† has also been there discovered, surrounded with wood ashes, and coals.

This *Prætorium* was, as usual, nearer to the *Prætorian gate* (p), than to the *Decuman gate* (d);—and the smaller streets seem to have run parallel to each other, and to its sides; and crossing each other, in the direction of the small dotted lines,—as far as it is now possible to trace them, by means of the quick decaying, and different colour, of such part of the corn as grows over the foundations of the buildings.‡

* See p. 37, in this Volume.

† Gough's *Camden*, Vol. I. p. 141.

‡ These streets appear indeed to have been at best very narrow;—but that is only what we might expect, consistently with the dimensions of all the old *Roman* streets that have been discovered, so as to have their dimensions ascertained.

The streets of *Athens*,—the most polite city of the early ages of antiquity, were, (according to the very curious and accurate measures of Mr. *Revely*, which he permitted me to see in MSS.) only *ten*, or at most *twelve* feet wide,—just as the streets of *Pompeii* were. (See *Archæologia*, Vol. IV. p. 168.)

And even the streets of ancient *Rome* itself, appear to have been not in the least degree of width more commodious, if we are to form any idea of them (as we may surely most justly do,) from what remains of its *ichnography*, engraved on the fragments of the ancient pavement discovered in the temple of *Romulus*; which were first removed to the *Farnese palace*, and then to the *Capitol*; and have been published by *Piranesi*, in his first Vol. p. 6.

From these fragments, it not only appears that the streets were narrow; but that the apartments, in many houses, were very small, and most strangely irregular.

It was *here* that, in the reign of *Honorius*, A. D. 407, the usurper *Constantine*, just before the destruction of the *Western Empire*, was advanced to the Purple, by the discontented soldiers, even, apparently, (and, possibly in reality,) against his will.

And, as a further proof of the Roman magnificence and splendour once exhibited at this place, (as far as any thing of that kind did in this country at all exist), *here* have been dug up considerable ostensible remains.

A curious *Roman Eagle*, wrought in steel, and very justly concluded to have formed the most distinguished part of a Roman military ensign, was dug up here about the year 1787, or 1788:* concerning which kind of military ensigns, [it cannot but be remembered, that they formed, what was called, by OUR LORD, the *desolation of abomination*, attending the Roman armies;—and which were to attend them, when they were to encompass *Jerusalem*.†

A curious ring of gold also, with an inscription, in truly Roman letters; and with a rudely engraved head, was found in this place, about the year 1786.‡

The city of Bath in like manner, if the conclusions may be relied upon§ that have been formed, with regard to such traces as have been discovered, appears to have been of the form of an *irregular Pentagon*, about 1200 feet in length, and 1100 feet in breadth, in the widest part;—(that is indeed far less than a *Consular camp*;)—having a strong wall surrounding it, 9 feet thick, and 20 in height, with five circular towers, one at each angle;—and having four gate ways, which faced the cardinal points;—whilst the great *fosse road* ran through it, (that is through its *principal street*) from north to south.—And here, as in so many other instances, we find a *church* now standing where once had been the *Prætorium*, and which is even *Metropolitan*, and has been an *abbey*.

Further, it ought now to be added, that we have a remarkable instance of a *camp*, even of *Agricola's*, where, on account of the

* *Archæologia*, Vol. IX. p. 370.

† *Matthew*, chap. xxiv. ver. 15. *Mark*, chap. xiii. ver. 14. *Luke*, chap. xxi. ver. 20.

‡ *Archæologia*, Vol. VIII. p. 449.

§ See Mr. Warner's ingenious illustration of Roman antiquities discovered at Bath.—*Introduction*, p. 12.—And also *Collinson's History of Somersetshire*, Vol. I. p. 8.

peculiar nature, and inequality of the ground, the proper form of a Roman encampment was departed from, even more effectually than either at *Pevensey*, or at *Silchester*.

It is that now called *Rae-dykes*, near *Ury*, about 3 miles from Stonehaven in Scotland; and is described by General Roy.*—It was of great extent; and therefore its outline is represented only on a very small scale, Pl. $\frac{\text{XXVIII}}{7}$, fig. 4.

But it is the more deserving of our attention, because another, and a most exceeding large camp of *Agricola's*, in the same tract of country, and nearly of the same name, at the distance of about 25 or 30 miles,—*Re-dykes* near *Glenmalen*, on the south bank of the river *Ythan*, was exactly on the *Polybian* plan; and quite regular in its form;† though a little more inclining to a *lozenge*, than to a *parallelogram*.

There is a curious instance also of Roman departure from their regular rules of castrametation, at *Burgh-head*, on the *Murray Frith*, the antient *Alata Castra* of Ptolemy.‡

After describing all these places, for the sake of obtaining a fair comparative view of the forms of *Roman Cities*, and *Stations*; we must not forget to mention, one of the very first *Castra* in point of time, and one that was by no means of the *least* importance; though its original form is now so much obliterated;—and especially as it retained, standing in it till very lately, distinguished remains of a perfect Roman structure;—and as it was, in its form, even more inclining to a circular, or oval inclosure, than *Pevensey*.

The fortress I mean, is that which has since been deemed even *the key of England*; *Dover*; and in the comparative view of Roman fortresses, Pl. XXVIII, fig. 12; as also in the subsequent large entire plan of *Dover*, that will be found in this Work, the same letters are put to mark the same parts.

(aaa) Shews what manifestly appears to have been the outlines of the original Roman camp;|| somewhat indeed in the form of a

* Military Antiquities, Pl. L.

† See Military Antiquities, Pl. LI.; and also Pl. I. and Pl. XX.; where the relative situation of these two *Camps* is shewn.

‡ Military Antiquities, Pl. XXXIII.

|| A part of the remain of this outline, as it continued visible in the year 1758, may be seen in Mr. Grose's plan, in his *Antiquities*, Vol. V.

parallelogram, with the corners rounded off; (as was frequently the case in other Roman camps, and particularly at *Chesterford*, and *Comerie*); but *here* with the corners so much rounded off, as to form nearly an oval;—the whole figure being indeed the more irregular, because it was in this instance, not only, like that at *Pevensey*, made to conform to the irregularity of the ground; but was very obviously constructed on the very spot, and nearly within the same precise boundaries, as seem to have contained an aboriginal *British hill fortress*.

The real existence of such a prior stronghold, may not only be concluded from its situation on the summit of a cliff, so very proper for the purpose; more than 300 feet in height;—and from the peculiar form of part of the outlines still remaining;—but may also very fairly be inferred, from the old tradition, which says, that *here Arviragus*, the British chief, fortified himself, when he refused to pay the tribute imposed by *Julius Cæsar*;—and that *here*, afterwards, *King Arthur* also held his residence.*

The irregularities, therefore, of this prior *British hill fortress*, did somewhat occasion the same sort of irregularity in the Roman works, and in the oval form of the Roman *Castrum*, formed on this strong spot.

The dotted lines shew where that part of the Roman fortification was in all probability continued, which is now destroyed.

Here *Julius Cæsar*, during his very short stay, and his ineffectual endeavours to make an approach on this coast, was so molested by the Britons strongly making resistance *from these heights*; (and probably in a more especial manner from this very fortress,) that he thought fit to sail to another part, near *Richborough*.

And here, afterwards, in the time of *Claudius*, (when the Romans may be supposed to have obtained possession of it,) this *British hill* stronghold seems to have been only just a little more fortified, so as to render it the more conveniently a *Roman camp*.

Julius Cæsar, if he ever landed here at all, had certainly no time either to gain the fortress, or to erect any structure.

The idea therefore of *his* having built the present *Great Keep*, or

* See *Darell's History of Dover Castle*, p. 8; and the old record in *Dugdale's Monasticon*.

Master Tower, quite on the outside of the circuit of this original inclosure, which tower from the current fable of dark ages has been called *Julius Cæsar's Tower*, can only be founded in vague tradition, and childish ignorance.

Here, however, though *Julius Cæsar* erected no great work, succeeding Roman commanders reared edifices; and a *watch tower*, or *Pharos*, which till very lately* remained at (b). Whilst this fortress, as being unquestionably one of the greatest importance, was in the latter ages of the Roman dominion in this country, one of those put under the care of the *Comes Littoris Saxonici*.†

Of the *Pharos* just mentioned, the component parts, by a strange coincidence of circumstances, plainly shew its age; for it is (as almost all truly Roman buildings usually are,) composed indeed partly of long thin irregular bricks; but in the intermediate courses, as no quarries of stone were conveniently at hand, both the facing and a great part of the interior substance of the wall was filled up, not as might have been expected with flints, and *chalk rubbish* from the neighbouring country;—but with an harder, and more effectually lasting substance than chalk, though lighter and fitter for carriage. For it is filled up, in a most unusual manner, with masses of *hard stalactitical incrustations*, cut into blocks of various dimensions, that could not well have been met with nearer than the more *northern coasts* on the east side of this island; where they abound in great numbers;‡ and which therefore could not have been obtained by any Roman commander, *prior* to the time of *Agricola*, who surrounded the whole island by a regular navigation for the first time; and who might therefore most easily, in *his* ships, convey, from the north to the south, these curious and durable materials, for the purpose of rearing this structure.

* It grieves me to be forced to add, that long since the writing of these sheets, this noble Remain has been (as I am informed,) pulled down.—An indifferent view of it, with the adjoining *British Roman* church, that was built afterwards, may be seen, in *Grose's Antiquities*, Vol. II.

† See *Horseley*, *Brit. Rom.* p. 472.

‡ There is a curious account of *Dover Castle*, published by the *Rev. Mr. Lion*, for the use of travellers;—who was so obliging as to give me, previous to that publication, a specimen of the remarkable substance here mentioned, from the walls of the tower. And on that occasion I was very fortunately enabled to elucidate to him, the fact of its being a real stalactitical incrustation, having seen vast numbers of a similar kind, in the more northern parts of this country.

By Agricola therefore, I will venture to conclude, without hesitation, was *this Pharos* built; rather than by *Publius Ostorius Scapula*, the commander under Claudius; who, if he established any station or fort here at all, most probably merely made use of the old British camp, with a few alterations, as the Romans did in so many other places.

And we may the rather adhere to such a conclusion, because the successors of *Agricola* had not so free a navigation round the island as he had;—and because his predecessors had never ventured upon any such navigation at all.

This Pharos, or Roman watch tower, was of an octagon form, on the outside, but square within;—the sides of the internal square, and each side of the external octagon, being about 14 of our feet, or about $14\frac{1}{2}$ Roman feet in dimensions; the thickness of the wall in the lower part was about ten feet; and the whole height was undoubtedly more than what remained, when I saw it, although that was about 40 feet.

The foundations were laid in a bed of clay; notwithstanding it is built on a chalk rock; a circumstance that has been taken notice of, with regard to some other Roman buildings.

It has an arched door way, about 6 feet wide, on the east side; and on the other three sides of the internal square were Roman arches, and narrow spaces for windows, about 13 feet and an half high, and near 4 feet wide, which were afterwards, in later ages, much altered, to convert them into Norman loop holes.

The old arches, at the top of these recesses, were turned with Roman tiles, and with pieces of the stalactitical concretion above-mentioned, cut wedge-shaped, about four times the thickness of the tiles, and placed alternately with them.

But what is most remarkable in this antient building, is, the form of the tiles themselves.—They are, indeed, as at Richborough, and in other Roman structures, of different dimensions in length, one being (as I found on measuring it) no less than 2 feet 10 inches, whilst they are all nearly of the same breadth, and of the usual narrow thickness, of about $1\frac{1}{2}$ inch; but some of them appear to have been cast in a mould, and of a form seldom, if ever, met with elsewhere;—for the tiles, in the lower part of the building, (and on

the eastern front especially,) are on one side adorned with *winding grooves*, and with four very odd protuberant *hemispherical knobs*, nearly equidistant from each corner; and at one end of each tile, near each corner, is a projecting part of about $1\frac{3}{4}$ inch in length, and $1\frac{1}{2}$ inch wide; whilst at the opposite end, near each angle, a void space is left of the same dimensions, so that by reversing the tiles, when laid in the wall, the projecting parts might drop into the void spaces like a sort of dove-tail work, and render it impossible for them to give way and slip from each other, in consequence of any internal pressure.*

With alternate courses (or *Θεμελια*), formed of these and other Roman tiles, and then of small blocks of the stalactitical incrustations, was this edifice constructed, from the bottom to the top:—each course of tiles consisting of two rows; and each course of stalactites, of seven rows of blocks, generally about seven inches deep, and about one foot in length.

Five of these alternate courses, in one part, like so many stages, or stories, were discernible a few years ago very clearly, notwithstanding the external casing, of the last century, had indeed in other parts, obstructed the seeing of them.

Such was this exceeding curious Tower;—the rather worthy to be described, because it pointed out *so decidedly*, in every part of its structure, the difference between original Roman works, and those of the Saxons, or Normans.

It was repaired in the time of Henry Fifth, by *Erpingham*, Lord Warden of the Castle; whose arms were then placed on a stone in the north front, (being two bars, and a canton).

It was afterwards made to contain bells; which being removed to Portsmouth, the lead covering was taken from the top, and the whole was, for years, grievously left to fall into ruin.

At (d), in this antient Roman camp, was a deep well for water, now arched over.

And at (e), was built in the very first Christian ages a church, of which there were, till within a very few years, considerable parts

* This remarkable workmanship, it may be observed, seems also to indicate a degree of attention, and skill, which can hardly, with propriety, be deemed peculiar to any age, so properly, as to that of *Agrioola*.

of the walls left standing, on the very spot, where we have every reason to believe, from the whole form of the camp, originally stood the *Sacellum* of the *Prætorium*.

At *Pevensey*, most probably, the *Hyginian* mode of encamping was made use of;—it might be so in like manner at *Dover*;—and most certainly was had recourse to, in most of those stations, which had been originally *British posts*; and where the antient outworks, and original *British* form was still preserved by the *Romans*;—a circumstance, that has often occasioned much confusion, in the writings, and descriptions of antiquaries.

BESIDES these great *Military Remains* of Roman grandeur; to which may be added the wall of *Severus*; and their admirable roads; there are very few, of any other kind, now visible in this country.

A few fragments of *public baths*;—and a few traces of *villas*;—a few mutilated figures, and statues;—some tessellated pavements;—small votive altars;—and funeral inscriptions;—are all the marks of their once fancied greatness, and splendour.—And surely, had there ever been any other kind of *existing specimens* of magnificence;—had there ever been superb buildings, either of stone, or brick; some other distinguished fragments of *such* must have remained, as well as those few that have, from time to time, actually been discovered, at *Bath*; or preserved at *Dover*; or at *Leicester*;—or in the walls of the *castra*, at *Richborough*, *Portchester*, and *Pevensey*;—or near the great wall of *Severus*.

To take it for granted that such did exist, but were destroyed by the *Saxons*, and *Normans*, is surely hardly allowable:—for where any considerable parts of *Roman* structures, have really ever been removed, and taken away, either by the *Saxons*, or the *Normans*, there seldom fails to be evidence of such facts, from the appearance of the *Roman bricks* used in the succeeding *Saxon*, and *Norman* works;—as at *Colchester castle*; and at the abbey of *St. Alban's*.

If even the most trifling parts of their structures, such as tessellated

pavements, and the very flues of their stoves, have remained, in the perfect state we now find so many of them; surely it may with good reason be asked, how it came to pass, that the greater and more substantial parts, (if any such there ever were) should have left no traces?—and the plain conclusion must be, that in general the superstructures were at best slight,—and often of wood;—and not like those very few more stately edifices, whose remains have really been found so long preserved any where;—either at Bath;—or at Leicester;—or at Canterbury;—or at Dover.

As, from the account given by contemporary authors of *Roman camps*, we must conclude, that *within* the great walls of the inclosure at Richborough, there were, except the Prætorium, only small tents; soldiers' huts; and wooden hovels:—so indeed, we may conclude fairly, that even upon the various *tessellated pavements*, that have been discovered, there were, in general, no buildings of any very extraordinary kind: but only such as were slightly built, and for the most part only one story high; and often constructed of timber. And that their houses in general, in this country, except a nest of small chambers, contained not much more than one good room, for the accommodation either of a *Centurion*; or of a *Tribune*; or of any resident *Roman*.

Deep rooted prejudices, and the ignorance of antient manners that attended the first returning dawn of literature, and that ever attends that early period of life in which we all most usually read the classic authors, have taught us to think very highly, (and indeed much more highly than we ought to think,) of the magnificence, and elegance of the *Romans*, in all respects.—But, in truth, whoever considers how few remains, or records, are to be found, of their ever having enjoyed the elegant conveniences, and comforts of life in their domestic situations, notwithstanding the pomp and magnificence of their public works, will be cautious not to be misled in his ideas, by the fragments of antient baths, or of antient temples, any more than by the idle tales, of the extravagant, and expensive, filthy dishes, of the table of *Heliogabalus*.—And when the contemplative mind considers, that it is only in a very few instances, where any solid remains, bespeak the existence of any extraordinary structures, even near the very fragile tessellated pavements that have

nevertheless been so well preserved; it will be led unavoidably to conclude, that really magnificent *private* mansions, did not in this country commonly exist.—And that, in most instances, a Roman *Questor*, or *Tribune*, sitting *here* in his *Toga*, on his moveable *Sella*,—or wallowing on his *Triclinium*, (with ideas well illustrated by the tessellated pavement described by Pliny,)* on one of these dull, dark,

* This curious mosaic pavement, was the work of a celebrated artist, *Sosus*, at *Pergamus*, and represented, in the design, such relics of a supper as were usually left on a floor, to be swept away;—affording us no very high idea of the cleanliness of antient manners: though the pavement is said to have contained also some most beautiful kinds of representations;—amongst which was, what Pliny calls, *that wondrous dove drinking, and darkening the water with the shadow of its head.* (Plinii Nat. His. lib. xxxvi. cap. 25. sec. 9. Paris edit.)

His *Grecism*, in the expression of *asaroton axon*, ἀσάρατον ἔξων, *the unswept mansion*, is a very remarkable one;—and no less remarkable, and as fully indicating *uncleanliness*, are the words *purgamenta cœnæ*.—They lead us to call to mind the *fourth*, *fifth*, and *eleventh* Satires of *Juvenal*; and amongst the rest those words. Sat. v. l. 25.

— de conviva Corybanta videbis,
Jurgia proludunt; sed innox et pocula torques
Saucius, et rubra deterges vulnera mappa;
Inter vos quoties, libertorumque cohortem
Pugna Saguntina fervet commissa lagena:
Ipse capillato diffusum consule potat,
Calcatamque tenet bellis socialibus uvam,
Cardiaco numquam cyathum missurus amico.

The translation that *Dryden* has given us, is not a very close one, nor sufficiently expressive of the energy of the original; but it will sufficiently explain the sense, to those who do not wish to have the trouble of examining critically the more nervous pointed language of *Juvenal* himself.

Then raving like a *Corybas* possést,
Thou and the freedmen first begin to jarr;
From mutual jeers, the prelude to the war,
Thou and thy fellow-parasites engage,
And battle with a troop of servants wage;
Then glasses, and *Saguntine* pitebers fly,
And broken pates, discolour'd napkins dye.
While, happy he, stretch'd on his couch, supine,
Looks on with scorn, and drinks old gen'rous wine,
Prest from the grape, when warlike *Rome* was free,
But kindly never sends one glass to thee.

Of the whole of these three Satires of *Juvenal*, all together, a good *Divine* might make great use, as an highly finished illustration of the first chapter of *St. Paul's* Epistle to the

and at best, ill looking works of mosaic, did not, after all, appear with much more real splendour, as to any advantages from the refine-

Romans,—and of the general Epistle of St. Peter, to the dispersed Christians.—1 Romans, chap. i.—1 Peter, chap. iv. ver. 2, 3, 4.)

And perhaps it ought to be added, that these accounts may very well be illustrated, by the gross manners of still more antient days;—and that Roman revellings, on *tessellated pavements*, may be deemed even a sort of *refinements* upon old Grecian revellings, so finely reproved by *him*, who may almost be called a Pagan *Divine Prophet*; the venerable *Homer*.

In that well known description, given us by *him*, of the *Suitors' feasts*;—after having described these illustrious *Nobles*, as having slain their swine, sheep, and oxen, even with *their own hands*;—and as having sat upon their *filed skins* for pleasure, whilst they played at games of chance;—he describes the *Princely Antinous*, as insulting the *apparently poor mendicant Ulysses*, by taking up his foot stool, and throwing it at his head.—And another Suitor, *Ctesippus*, as flinging a pastern-bone at him, and greasing the wall.

The lines as translated by *Pope*, are curious,—

Swift to the hall they haste; aside they lay
Their garments, and succinct, the victims slay.
Then sheep and goats and bristly porkers bled,
And the proud steer was o'er the marble spread.

Book xvii. l. 199, &c.

Again, From council strait th' assenting peerage ceased,
And in the dome prepar'd the genial feast.—
Disrob'd, their vests apart in order lay,
Then all with speed succinct the victims slay:
With sheep and slaggy goats the porkers bled,
And the proud steer was on the marble spread.

Book xx. l. 310, &c.

On *hides of Beeves*, before the palace gate,
(Sad spoils of luxury,) the Suitors sate:
With rival art, and ardour in their mein,
At chess they vie, to captivate the Queen.

Book i. l. 140, &c.

To the poor *apparent mendicant* (the disguised Ulysses), who had been begging for morsels round the hall; in the latter part of the *Odyssey*, (*Antinous* cries with insolent disdain),

Portions like mine if every Suitor gave,
Our walls this twelvemonth should not see the slave.
He spoke, and lifting high above the board
His pond'rous footstool, shook it at his lord.
The rest with equal hand conferr'd the bread,
He fill'd his scrip, and to the threshold sped.

Book xvii. l. 439, &c.

ments of civilized life, than an old *Scotch Laird*, in the Highlands, sitting *in his plaid*, on a *joint stool*,* or on a chair of not much better

And when the poor *apparent mendicant* had humbly from the threshold replied to repeated insults, and mockery; Homer adds of Antinous,

The haughty Suitor with resentment burns,
And sow'rly smiling, this reply returns.
Take that, ere yet thou quit this princely throng:
And dumb for ever be thy sland'rous tongue;
He said, and high the whirling tripod flung.

Book xvii. l. 543, &c.

After which the rich, and jesting *Samian Peer*, *Ctesippus*, on another occasion, cries out,

The sentence I propose, ye Peers, attend:
Since due regard must wait the Prince's friend,
Let each a token of esteem bestow;
This gift acquits the dear respect I owe;—
He said;—and of the steer before him plac'd
That sinewy fragment at *Ulysses* cast,
Where to the pastern-bone by nerves combin'd,
The well-horn'd foot indissolubly join'd;
Which whizzing high, the wall unseemly sign'd.

Book xx. l. 359, &c.

The dirt and filthiness of the hall, after these sort of feasts, is also as curiously described.

What marks of luxury the marble stain!
Its wonted lustre let the floor regain;
The seats with purple cloathe in order due;
And let th' abstersive sponge the board renew.

Book xx. l. 186, &c.

The words of the original in all these passages are still stronger, as to the *uncleanliness*, than *Pope's* translation;—and with regard to *Pope's* expression, concerning *the Dome*, it ought to be remarked, that there is *no word* to warrant *such* an expression, in *Homer*.

For the corresponding passage, in the original, is merely; lib. xx. l. 248.

Ἐλθόντες δ' εἰς δώματ' Ὀδυσσεῦς θεῖοιο,

Coming to the mansion of the divine Ulysses.

All the passages also, with regard to the *slaying of the victims with their own hands*, are even

* A curious little piece of ancient sculpture, in ivory, mentioned by Mr. Pennant, and found in *Dunstaffage Castle*, conveys to the mind some sort of adequate idea (even though bordering too much upon burlesque) of the rude magnificence of early days. See *Voyage to the Hebrides*, p. 354. Pl. XLIV.

construction, in the corner of his rough, rude *Castle Tower*; or of his as rude summer tent; where he was attended by his *bagpiper*; who had derived his art, (as we have seen in the instance of *the bronze bagpiper* dug up at *Richborough*,) from the very music practised in the Roman armies, and before Roman officers.

These observations may perhaps appear a little too harsh; but they are really somewhat needful, to counterbalance the unreasonable prejudices that have been too often formed;—and for elucidating the truth, as founded on *facts* that are unquestionable.

Let us now then refer to a few particular descriptions, and representations, of some of these *tessellated pavements*; that have been so well preserved, through many ages, whilst the superstructures have perished.—Let us see what fragile things, in their own nature, they were; and how impossible it was that *they* should have endured the violence that destroyed the latter; if their superstructures had been at all built in any very solid manner; or had been in any degree of the commonly supposed magnificence.

more plain and decisive than the words of *Pope*;—adding (lib. xx. l. 252.) that, *roasting the entrails, they distributed, (or handed) them about.*

Σπλάγγνα δὲ ἄρ' ἐπ' ἡσάσιν ἐνώμων.

And, when the Suitors are described as sitting on the raw hides, the words are more express, lib. i. l. 108.

Ἥμενοι ἐν ῥινοῖσι βούων, ὅς ἕκτανον αὐτοί.

Sitting on skins of Oxen, which they themselves had slain.

Whilst, to the account of *Ctesippus's* flinging the pastern-bone, is added, lib. xx. l. 299, 300, (instead of mentioning *any disk*) that he took the ox foot out of *the canistre, or basket, where it was lying.*

ἔβριψε βούος πόδα χειρὶ παχείῃ,

Κείμενον, ἐκ κανέσιο λαβών.

Nothing surely can afford us a more effectual clue to develop the real state of rough uncleanly antient manners, than these passages.—We may allow the Romans to have become somewhat more refined than those Grecians, from whom they at first derived such refinements as they had;—but after all, the delineation of human manners, unrestrained and unguided by spiritual light, and religion, is a most unpleasant one:—and whilst we may venture to consider *Homer* as a reprover of them, and as being almost a divine prophetic teacher of better manners, and of better principles; we may perhaps also add, that, in the accounts he gives, both in the *Iliad*, and *Odyssey*, of the *heathen deities*, he in reality seems to have intended to *expose*, and to *reprove* (like *Socrates* in succeeding days), the corrupt abominations, and folly, of Pagan worship; and of the then prevailing, foolishly wicked, and superstitious ideas with regard to religion.

In the year 1736, a very beautiful work of this kind, wrought in a very artificial manner, was discovered near *Cotterstock*, in *Northamptonshire*; which has been engraved in the *Vestusta Monumenta*.* It was about 20 feet square. Its appearance is unquestionably dull and heavy, as that of all these compositions must have been; but yet is such, as shews great design, and masterly execution: such as (from the delicacy of the materials,) it was very difficult to preserve, when once it had been discovered;—and such as could, therefore, never have been preserved amidst the shock and destruction of any very strong surrounding walls.

Another of a most irregular pattern, and less elegant design; but even of a more delicate composition, was discovered in 1737, at *Wellow*, near Bath, in *Somersetshire*;† this was 32 feet in length, and 22 in breadth; proportions that indicated undoubtedly the existence of at least *one* good room in some structure here situated.

A second, of a better composition, 20 feet in length, and 15 in breadth, was discovered at the same place.

And also a third, 18 feet long, and 5 broad, with which seems to have ended the distinguished apartments that existed on that spot.

All these were at no great distance from each other, and might have belonged to one and the same villa.—But *what sort* of buildings could have stood *over these pavements*, to have left them so entire, at the time when those buildings were either demolished or removed?

Three more were discovered, at *Winterton*, in *Lincolnshire*, in 1747, two of which were pretty perfect.

One of these about 30 feet by 20, (the same sort of proportion as the former) had, in the middle, a representation of *Orpheus*, playing on his lyre, surrounded by beasts; but so represented, that he seems quite as rude an animal, as those he is charming.‡

Another of these pavements is about 40 feet long, and only 13 wide.

And the third was mutilated.

* Vol. I. Pl. XLVIII.

† These also have been engraved in the *Vetusta Monumenta*, Vol. I. Pl. L. LI. LII. They are mentioned by Mr. Gough in his 2d. Vol. of *British Antiquities*; and some further particulars relating to them may be found in the *Gentleman's Magazine* for 1787, Vol. LVII. p. 951.

‡ See an engraving in the *Vetusta Monumenta*, Vol. II. Pl. IX.

A mutilated pavement, of an elegant pattern, was also discovered at *Roxby*.

A well known beautiful pavement* also, (much resembling one found at *Morvedro* in Spain, the antient *Saguntum*,†) was discovered at *Stunsfield*, near *Woodstock*, in Oxfordshire, in 1712.—It was 35 feet by 20; and was entire when first uncovered; as were the mosaic pavements of three other rooms near adjoining, of 19 feet 10 inches, by 19 feet 11 inches; of 12½ feet square; and of 12 feet square;—but from the delicacy of their texture, and other causes, (though not at all hurt by the pulling down of the original superstructures) they are now all gone, and destroyed.

A fragment of a Roman pavement belonging to a bath, and sudatory, was again discovered at *Hovingham*, in Yorkshire.‡

Two fragments of Roman pavements were also discovered in *Pit-mead*, near *Warminster*, in Wiltshire, in 1786;§ which have somewhat of elegance in design; but are of very rude execution. And near these pavements, a smooth floor of artificial work in stone was discovered; which probably belonged to the same building, and shewed that the whole extent of it was not ascertained:—but yet, neither near the mosaic pavements, nor near the plain one, were there found any large stones, or any such as appeared to have been used for any durable structure; though indeed the foundations of some buildings were found at about 40 yards distance;—and still further off, an heap of the coarser sort of large tesserae.||

As rude nearly as the foregoing, was a pavement found at *Cirencester*.

A pavement, supposed to have been that of some Mausoleum, from urns, and fragments of bones found on the spot; having in the centre, the figure of a man on horseback, and around this, ornaments,

* It was engraved by *Vertue*. And an account of it by *Hearn*, may be seen in *Leland's Itinerary*, Vol. VIII.; *Gough's Camden*, Vol. I. p. 296. *Archæologia*, Vol. XI. p. 37.

† *Caylus*, Vol. II. Pl. CVII. p. 365.

‡ Both the one and the other were also engraved by *Vertue*; with a description by *Mr. Drake*.

§ They are engraved in Plate XLIII. of the *Vetusta Monumenta*, Vol. II.—And also in the *Gentleman's Magazine*, Vol. LVII. p. 221.

|| These are mentioned in the *Gentleman's Magazine* for 1737, p. 222.

and borders of wreathed work, was discovered in *Wansted Park*, about the year 1715: and near it were some remains of the foundation of a wall, constructed with Roman bricks.*

At *Caerwent*, in Monmouthshire, is a Roman pavement; which I examined myself, with much attention, in the year 1788.—It is about $21\frac{1}{2}$ feet in length, and $18\frac{1}{2}$ in width, and was very perfect a short time before I saw it; but was then obviously and quickly going to ruin, by means of having had several of the tesserae picked out of it, and water continually poured over it to make the figures appear brighter, which, in consequence of the cavities left where the dies had been picked out, caused a swelling up, and dislocation of the adjacent parts.—And the same was the case with another pavement, which I examined at *Leicester*, some years before; on which was represented the figure of a naked female, leaning on the neck of a stag; whilst a Cupid seemed to aim an arrow at her.—A group, intended perhaps to describe *Diana*, at the instant of her transforming *Actæon* into a stag, for his presumptuous intrusion.

Neither of these pavements appeared to me at all pleasing ornaments for any apartment; though the work was undoubtedly curiously artificial:—the latter was even black, and dismal, notwithstanding the glaring colours of some parts; and that at *Caerwent* was excessively dull, and faint; notwithstanding the advantage given to its appearance, by pouring of water upon it. The curious wreathed border was, however, certainly of nice workmanship; † as was that on a former pavement discovered near this place some years ago. And whatever was the real age of these works, (whether in the time of *Agricola*, or later); a copper coin of *Carausius*, which I brought away with me, and that had just been dug up near the pavement I so carefully examined myself, indicated plainly, that this pavement had been continued in use, so lately as about the year 293.

The tesserae, or dies, whereof this pavement was composed, are nearly cubes, of about half an inch square; and they are of three several colours;—a dusky blue;—a faint light red;—and a yellowish white.

* See *Archæologia*, Vol. I. p. 73, 74.

† See also in the *Archæologia*, Vol. V. p. 58. Pl. I.; and Vol. VII. p. 410, 411.

Those which I saw at *Leicester*, as nearly as I can remember, were of a black colour;—of a deep-red;—of a deep-yellow;—and of a finer white than the former.

Those of the pavement before described at *Pit-mead*, near *Warminster*, were of reds of different shades;—and of a black colour;—of a brown colour;—of a pale-yellow colour;—and of a white colour;—and were somewhat smaller than the others just mentioned; and some of the black ones were very minute indeed, so as to serve for forming a sort of outlines to the figures. Most of the tesseræ, or dies, used in Britain, were of these kind of dimensions; and were in general formed merely of stones dug up in the very neighbourhood of the spots where the pavements were; with the addition only of little cubical dies of brick for a strong shade of red, and now and then of an hard calcareous stone, something like *Palombino* marble, for a bright white.—Nevertheless it is true, that for forming the finer kind of pavements, the Romans carried about with them bags of prepared dies, to all their colonies;—and some they had that were of a still more beautiful kind than any that have been discovered with us, being even vitrified; a few of which are in my possession, that were cast up by the sea, at *Pozzuoli*, in the Gulf of Naples; and seem to have belonged to some antient buildings, at the celebrated *Baiæ*, from whence they had been washed. They shew what the utmost perfection of this kind of work was amongst the Romans; and account for the distinction made by *Vitruvius*, between the *Sectilia*, and *Tesseræ*, better than most other specimens.

They are all vitrified like glass, with surfaces that evidently were once finely polished:—they are not more than $\frac{1}{4}$ of an inch square; and some of them of irregular figures.—They are some of a bright green;—some of a bright blue;—some of a fine red;—and some of a clear yellow colour.

The Romans had also, for the coarser work of more ordinary floors, larger and ruder dies of mere brick. I have several of above an inch square: and one of these ruder floors was discovered, in a garden at *Colchester*, in *Essex*, in 1771, that shews exactly what this coarser kind of work was.

A fragment of it in my possession, is $4\frac{1}{4}$ inches long, and $3\frac{1}{2}$ inches

broad ; and consists of tesserae or dies, that are not only made merely of brick, and about an inch square, but very irregular ; being some a little more, and some a little less, in dimension ; and they are all roughly bedded in coarse mortar.

Just such another pavement I saw, at *Leicester*, near what is called the Temple of Janus ; a good contrast to the finer pavement which has already been mentioned, as being at that place.

Pliny is very full in his description of all these kind of pavements ; and he may be observed to speak of them as being indeed no ways common, but matters of elegance and curiosity, *even in his days*. We may be assured, therefore, that they were never lavishly placed ; or unnecessarily bestowed, *where* there were not such edifices as were deemed quite proper to receive them.

And hence the conclusion must be, since so many such pavements have been discovered in this country, without any remains of great and substantial foundations of walls, that even what were deemed quite proper superstructures, for the reception of such ornamental works, were yet themselves but slight edifices ; generally only one story high ; and often built merely of timber ; and by those carpenters, who, according to the very curious account given us by Josephus,* usually followed a Roman camp.

Pliny tell us,† that these *tessellated pavements* succeeded to the old painted pavements ; which had their origin in Greece. And he describes such as were made of rude *tesserae* of brick ;—those made of smaller dies, or *tesserae*, of different colours ;—those made either of bits of shells, or tiles, (or *testulae*, as he calls them) ;—and those made of *glazed tesserae* ;—or tesserae of glass : just such as have been mentioned in the preceding page from *Pozzuoli*, and *Baiæ*.—And he adds an account also, both of the manner in which they were inlaid, and of the composition in which they were bedded ;—and more especially of the manner in which those were to be secured, and fixed, that were to be exposed to the open air ; either on the roofs of houses ; or on elevated terraces ; or in open porticoes.

And of this latter kind we may conclude that was, which had

* Josephus de Bello Jud. lib. iii. cap. 5. sec. 1, 2 ; and see before p. 58, in this Vol.

† Lib. xxxvi. cap. xxv. sec. 60, 61, 62, 63, 64, of the Paris edition. See also Vitruvius, lib. vii. cap. i. p. 127, 128.

been introduced into *Palæstine*, and which is mentioned in St. John's Gospel,* on so tremendous an occasion; even when " Pilate (says " the beloved Apostle) sat down in the judgment seat, in a place that " is called *the pavement*, *Αὐβέζωτον*, but in the Hebrew, *Gabbatha*."

Virtruvius calls the forming of the strata for these pavements, *Ruderatio*.—But that there was no one precise rule observed (at least by the Romans in Britain,) for performing the operation, appears manifestly from the remains of the layers under such pavements as have been examined.

Mr. *Lysons*, in his most valuable work, which I shall have occasion to refer to more particularly on another occasion, has, by his late discoveries, placed this fact in the strongest light.

Under a tessellated pavement, discovered at *East Bourne*, in 1716, the layers were,†

1. Fine sharp sand and ashes, or rather a composition of stamped brick and potsherds.
2. Coarse mortar 9 inches thick.
3. Clay 2 feet thick; the surface of which was pitched with small flints, and stones pointed at their lower ends.
4. A firm foundation of brick as a support for the whole.

But under a pavement which was discovered in 1788 at *Wroxeter** were,‡

1. A bed of mortar 1 foot thick.
2. Then only rubble stones to a considerable depth.

And under the great pavement which Mr. *Lysons* so minutely examined himself,§ at *Woodchester*, was found,

1. A bed of cement, 8 inches thick, composed of fine gravel, pounded brick, and lime.
2. And then one of gravel 3 feet thick; mixed with loose tesserae.
3. And beneath this a third stratum, that had been prepared of sand, clay, and loose pieces of brick, 1 foot thick.

Besides these pavements already described, others are said to have

* Chap. xix. ver. 13.

† This pavement is particularly described, by Dr. Tabor, in the *Philosophical Transactions*, Vol. XXX. p. 549. And in *Jones's Abr.* Vol. V. Part II. p. 63.

‡ See Mr. *Lysons's* account of *Roman Antiquities at Woodchester*, p. 5.

§ *Antiquities of Woodchester*, p. 4, and 5.

been found at *Warminster*;*—at *Old Castle* near *Brecknock*;†—and again another in 1783, in a cherry orchard, at *Leicester*;‡ different from that which I saw.—Such also have been found near *Bath*;§—at *Nether Hayford*;—and at *Castor*, in *Northamptonshire*;||—and in many places which it would be tedious to enumerate.—It is sufficient, by the instances that have now been mentioned, to shew in what an extraordinary manner they have been preserved entire, or nearly entire, for so many ages, whilst the structures to which they belonged are perished:—and to shew what small proportions they were sometimes of;—and how slight the buildings in general must have been that covered them.

And indeed, in most instances, where there has been at all an opportunity of tracing the foundations themselves of such buildings, they uniformly give us the same information.

In a villa discovered near *Cirencester*, in *Gloucestershire*, in 1787;¶ the rooms had, both tessellated pavements, and pavements of stucco, and remains of stuccoed walls:—and here were found six rooms in a row, adjoining side to side; yet were they every one of them so small, as to be only about 12 feet square.—There were, however, two rooms considerably larger at one end of their range; and an hypocaust of considerable dimensions at the other end.—And as a proof that this was a place of no small consideration, here were found even some remains of glass; and upon an adjacent tessellated pavement, that had plainly belonged to a sort of *Crypto-porticus*, 54 feet long, and 14 wide, were found several slates of a rhomboidal form, that had covered the pent, or roof, and had the very nails sticking in them, whereby they had been fastened.

Again near *Weldon*, in a corn field of Lord Hatton's, in 1738, was found a Roman pavement of a *Crypto-porticus*, 96 feet long, and only 10 broad; having remains of a sort of gallery 100 feet long in

* See the Gentleman's Magazine for 1787, p. 221.

† *Archæologia*, Vol. VI. p. 13.

‡ It is neatly represented in the Gentleman's Magazine for 1786, p. 825.

§ *Antiq. Britan.* Vol. III. p. 151. tab. 6.

|| Morton's *Northamptonshire*.

¶ *Archæologia*, Vol. IX. p. 321.

front: whilst the whole building, as far as could be traced, seemed to have been in the form of an half H, 100 feet the longest way, and the sides 50; having rooms on each side, and the centre left clear. It was supposed some of the rooms on each side* were 30 feet square; but that appears manifestly to be inconsistent, with the dimensions of the whole, given by the person who made the supposition; and who yet says that *it was sided* (to use the expression of Mr. Gough) *by several rooms*.—There were foundations of a stone wall; but the superstructure appeared to have been timber, and to have been burnt down; as the pavement appeared burnt in several places, and there were tiles lying upon it.

With these remains were found a great number of coins of the Lower Empire, and several of Constantine, and Constans.

A further and most interesting Remain of this sort, is accurately described, and illustrated, by Mr. *Rooke*, in the *Archæologia*, where a plan is given of the whole,† of which a slight proportional outline, upon a smaller scale, is here added, Pl. $\frac{xxviii}{8}$, fig. 1. just for the further illustration of these present remarks.

It was discovered in the year 1786, near *Mansfield Woodhouse*, in Nottinghamshire.

And it seems, from its many ornaments, and from its situation, so cautiously chosen, (in a spot where there does not appear to have ever existed any Roman, or British *Town*); as also from its traces and remains having continued so long, when those of so many other edifices are entirely perished; to have been *a villa* rather than a public bath;—and a villa of great distinction.

Yet we may fairly conclude, both from the nature of the foundation walls; and from the situation and dimensions of the several apartments; that it could not be, in point either of elegance, or convenience, much superior to those habitations discovered at the *antient Pompeii*, in Italy;‡ where we are led to wonder, at the same time, both at the profusion of painted walls; and also at the extreme

* Gough's *Camden*, Vol. II. p. 181. See also *British Top.* Vol. II. p. 84; and *Gale's Letters*, p. 460.

† *Archæologia*, Vol. VIII. p. 364. Pl. XXII.

‡ See the representations of them in the *Archæologia*, Vol. IV. p. 168, 169, 170. Pl. XII, XIII, XIV, XV.

uncomfortableness, and unpleasantness of the dwellings, on which they were bestowed.*

As to this antient villa, in Nottinghamshire; it appears to have consisted merely of *seven* small rooms, and a very narrow passage; with one other very small room, and a sort of kitchen adjoining; and there is cause to be fully persuaded, that there were no upper apartments over any of these:—for besides the other circumstances to be taken into consideration, there is not the least appearance of the fragments of any staircase either within or without.

The entrance was apparently in the middle of the narrow passage (c): which may be dignified (according to the descriptions of antient authors) with the name of a *Crypto-porticus*; but was, though 54 feet in length, yet only 8 feet wide: and could therefore merely be a sort of open colonnade;—or else must resemble the long narrow galleries of some of our old public inns.—It had however painted walls; the paint laid on a stucco composed of lime and sand; and it had a *tesselated pavement*, containing compartments about a foot square, formed of small tesserae, nearly three-eighths of an inch square; and surrounded by a border of larger tesserae, each whereof were about a cubical inch in dimensions, and of a light stone colour.†

Almost exactly in the middle of one side of this *Crypto-porticus*,

* There seems very great reason to be convinced, that most of the greatest, and most elegant improvements of Roman architecture, either in private mansions, or even in public buildings, were introduced so late as the time of the *Antonines*; and subsequent to the age in which *Pompeii* was destroyed, and overwhelmed by the shower of ashes, described by *Pliny*.

Adrian was the first Emperor who began to display, by sumptuous public buildings, in all the various regions of the world, the elegance and magnificence of Roman architecture, improved by adopting the Grecian style; and following his example, with still more finished designs, the fine remains at *Balbec*, and *Palmyra*, and also in *Italy* itself, display sufficiently the high taste and grandeur of *Antoninus*, and *Marcus Aurelius*, and even of succeeding Emperors, down to the time of *Aurelian*:—but as to all those advantages of *convenience*, and ornament, which now adorn *modern palaces*, and even *private dwellings*; and render them both dignified, and comfortable; it is well known, that *such* improvements, were principally introduced, even so late, as by *Michael Angelo*, and *Palladio*.—Yet the world has been, (from the mistaken ideas of early education,) too prone to carry back, and to refer the ideas properly belonging to *these latter improvements alone*, to the earliest ages, when such improvements did not any where exist.

† See Mr. *Rooke's* very curious account in the *Archæologia*, Vol. VIII. p. 365.

or narrow passage, was found, *that* which must have been the *principal apartment*, 20 feet 5 inches in length, and 19 feet in width;—having a very elegant mosaic pavement,* and having the bottom part of the walls, (of which there are still some remains,) painted on stucco, in stripes of purple, red, yellow, green, and other colours.

To the right of this chief apartment, was one ($\frac{b}{7}$); 19 feet by 14; and then still another ($\frac{b}{2}$), beyond it, of exactly the same dimensions.—And to the left of this chief apartment were two others; the first ($\frac{b}{3}$), 19 by 9; the second ($\frac{b}{4}$), 19 by 18.

At each end of the *Crypto-porticus*, or long gallery, and projecting a little before the front, like a wing, was also a small room:—that, at the end to the right, ($\frac{b}{7}$), 16 feet 8 inches, by 12; and that at the end to the left, (g), of the same dimensions;—only this latter was also manifestly an *hypocaust*, or stove, having under it flues at (e), 1 foot wide, and 14 inches deep; at the end of which was placed upright at (x), a large moveable tile, for the obvious purpose either of excluding, or of letting in the heat, by means of an arch through the wall from the out side, where a quantity of ashes were actually found.

Beyond this *hypocaust*, and still further to the left, were two *out-buildings*;—the first (h), only 11 feet by 9; but the second (f), adjoining to it, 24 feet square.—This, upon its floor, which was of stucco, had visible marks of fire, in *two or three* places; from whence perhaps it may be concluded to have been a place for dressing provisions;—or a sort of kitchen:—whilst from thence also we may fairly be led to conclude, that there could be no apartment over it, as the smoke was necessarily to make its way out somewhere, either through, or near the roof.

It is remarkable also, that even in the other apartments, in most of which there appeared to have been painted walls; yet there were no remains of fire-places within them with chimneys; and that they must have been warmed, when needful, either merely by hot air from the adjoining *hypocaust*; or by fire, placed *in pans*, in the middle of the rooms;+ which latter method seemed, from some

* There is a very good engraving of it in the *Archæologia*, Vol. VIII. Pl. XXIII. p. 364.

+ This was the usual way of making fires, derived from the earliest ages.—Thus we read concerning the indignant burning of the roll of Jeremiah's Book of Prophecy by

other marks, and from ashes left on the floors, to have been indeed made use of.

The outer walls in general were about $2\frac{1}{2}$ feet thick, except in one part, where they seem to have been strengthened by a sort of buttresses;—and the partition walls were about $1\frac{1}{2}$ foot.—And it ought not to pass unnoticed, that, in the principal apartment, the tessellated pavement did not reach so near towards the wall on the west side, as on the east; which seems to have been designed, purposely, to leave space for the *Triclina*, or couches; such as were usually deemed proper for a *Triclinium*.

The front of this dwelling, and of its *crypto-porticus*, was a little to the southward of the east.

And the dimensions of this *Crypto-porticus*, obviously bring to mind those of one of the pavements that have been mentioned, as being found at *Winterton*, in Lincolnshire; which was 40 feet in length, and only 13 in breadth; and may therefore fairly be deemed to have belonged to just such another entrance; and the rather, as the tessellated pavement of a room, concluded to have been a *Triclinium*, or entertaining room, was found near adjoining; in which latter was the very pavement adorned with the strange ill formed figure of Orpheus.

It should be remembered also, that another pavement, already described, as found at *Wellow*, in Somersetshire, shews how much the narrow gallery, or *Crypto-porticus*, was in use in all these kinds of edifices. It was there only 17 feet long, and 5 feet wide;

Jehoiakim King of Judah; that the King sat in the winter-house, in the ninth month; and there was a fire on the hearth burning before him. And it came to pass, that when Jehudi had read three or four leaves, he cut it with the pen-knife, and cast it into the fire that was on the hearth, until all the roll was consumed in the fire that was on the hearth. Jeremiah, chap. xxxvi. ver. 22, 23.

So when Our Blessed Lord had been betrayed, and delivered into the hands of his malicious enemies; and was brought into the High Priest's house, the servants, and officers, kindled a fire, IN THE MIDST OF THE HALL, because it was cold. Luke, chap. xxii. ver. 55. John, chap. xviii. ver. 18.

The method of warming rooms by flues, and *hypocausts*, was first introduced, only about the time of the Emperor *Nero*, as we are informed by *Seneca*.§

§ Senecæ, Epis. 90.

* See *Vetusta Monumenta*, Vol. II. Pl. IX.

but it also had two rooms, with fine tessellated pavements, near adjoining; one of which appears here, as before, to have been a *Triclinium*.*

A third pavement also, 56 feet in length, and 14 in breadth; discovered in 1779, † at *Colesbourn*, in Gloucestershire, with the tessellated pavement of a room close adjoining to it, intimates to us just the same thing. And especially, as near to it was discovered a range of six small apartments, each about 12 feet square, with two larger rooms at one end, and an *hypocaust* at the other.

Near the Roman villa in Nottinghamshire, which we have just been describing, were discovered the foundations and remains of another; which Mr. Rooke wishes to consider as being the *Villa Rustica*; whilst the former, just described, was the *Villa Urbana*;—pursuing the ideas of *Columella*; who says a Villa consisted of three parts; *Urbana*; *Rustica*; and *Fructuaria*;—the first for the master's use;—the second for the servants, and cattle;—and the third for repositories of corn, and wine, and oil.

But from the disposition of the apartments, and from its *painted walls*, one cannot but be inclined to suspect that this second discovery, must indeed have been of the foundations of a distinct villa;—and the rather, because its relative situation, is so extremely irregular in respect of the other.—To which we may add, that there are also a distinct set of smaller apartments, at the end of the area inclosing the whole of this second villa, which seem much rather to have been its own proper *pars Rustica*, than to have belonged, in any manner, to the other villa.

The longest side of the wall forming the inclosure of this second villa, which is only about 30 feet distant from the former, and which surrounds an area in the shape of a parallelogram, or, as it is vulgarly called, of a long square, is 142 feet; and the end walls are about 46 feet in length.

At the west end of this area, Pl. $\frac{xxviii}{8}$, fig. 2, nearest to the former villa, were eight apartments, forming one compact building; whose

* *Vetusta Monumenta*, Vol. I. Pl. LII.

† A part of it is represented in the *Archæologia*, Vol. IX. p. 319; and as several slates were found fallen upon it of a rhomboidal form, with the very nails in them with which they had been fastened, it should seem as if the roof had been a mere pent.

tessellated floors, and painted walls, seem plainly to indicate that they did as effectually form that part of the mansion called *Urbana*, or which was designed for the master's use, as any of those in the former villa.

At the entrance of this building, that stood at the west end of the court, near the middle of its front was found a room (m), 18 feet by 17, with painted walls, having the colours remarkably bright; and with a smooth stucco floor. On one side of this, was again a room (n), 17 feet by 11; which had also, painted walls, and a stucco floor;—and, on the other side, a room ($\frac{n}{2}$), 17 by 8, with a stucco floor; but without painted walls:—beyond these, and more to the west, oddly separated by a party wall thicker than the outward wall, were three other rooms, with plain walls, and stucco floors;—the middle one (l), 11 by 17; and those at each end ($\frac{l}{2}$), 11 feet square. —On each side the entrance first mentioned, in the front, are two little projecting wings, as in the former villa, containing each a small room ($\frac{n}{3}$), and ($\frac{n}{4}$), of 11 by 8; and on one side of this range of building, as in the former instance, was found a small adjoining outbuilding ($\frac{n}{5}$), 11 feet 6 inches, by 6½ feet.

At the other, the east end of the court, which contained the whole inclosure; and in the middle of a distinct range of building that stood there; was a room (o), 13 feet square, with painted walls, and a stucco floor.—On one side of which was a second (p), 13 by 12; and on the other, a corresponding apartment (q), of much the same dimensions, that was an *hypocaust*. This building, at the east end of the court, had also two narrow wings, on each side of its entrance, longer than those of the building at the west end: the one (r), containing a second long narrow *hypocaust*, adjoining to the room (p), with its stove (s); whilst to the room (p), there also belonged a little projecting building (u), 8 feet 6 inches, by 3 feet 2 inches; containing a *cold bath*, 5 feet by 3, with a leaden pipe for carrying off the water, into a sort of trough in the wall (y), 7 feet by 2, from whence it ran off, through fissures in the rock:—and the other narrow wing, contained three very small rooms;—8 feet by 9;—8 feet by 4;—and 8 feet by 4: the first of which ($\frac{s}{2}$), seems to have been a *stove* for the *hypocaust* (q).

Such were these two Roman *villæ*; or, (if any person still chooses

rather to consider the whole in that light,) the different parts of this one considerable *villa*;—and how few good, or even tolerable apartments were there!—not more than six, out of twenty eight rooms;—and one of those obviously a sort of kitchen:—to say nothing of the small proportions of 19 feet by 14 feet, of some of those which must be allowed to have passed for the best rooms.

The foundations of the ruinous building, discovered in the south-east angle of *Castle Cary*, that are described by *General Roy*,* shew nothing better; (though that building must have been reared in the very latest ages of Roman residence in those parts, and after all regular mode of encamping there had been laid aside.

The rooms, except one of 31 (including its two bows), by 13, or at most 14 feet, are of the smallest proportions;—18 by 10,—18 by 11,—18 by 12,—and 18 by 16;—and the circular bath adjoining, is only of 12 feet in diameter; whilst there are little circular cavities in the foundation walls, of 3 or 4 feet diameter, of which it is difficult to conceive the use, unless they were wells; as they could never have served for staircases.

The whole is delineated, on the same scale with the former, in Pl. $\frac{xxviii}{8}$, at fig. 3.

Nor can any thing better be said, from what has been hitherto discovered, concerning the remains of a building, and hypocausts, at *Netherby* on the river *Esk*;† of which a sketch is given on the same scale with the former, Pl. $\frac{xxviii}{8}$, fig. 4.

The room (a), was 17 by 14;—($\frac{c}{7}$), 14 by 8;—and ($\frac{c}{2}$) $13\frac{1}{2}$ feet square;—whilst (e) was 21 by 14;—which latter seems to have been a sort of Pagan *Sacellum*, having an altar found in it with an inscription;—and (f) was 21 by 11;—and seems to have been a bath.

The rooms, a, b, $\frac{c}{7}$, and $\frac{c}{2}$, were all hypocausts, with flues under them, constructed in the usual well known manner; and at (i), and (k), were the places for the fires to heat them.

This very probably was, as general Roy conjectures, only about one half of the entire building; but even suppose the other half, on the north side, to have corresponded with this on the south;—

* *Military Antiquities*, p. 161, 200. Pl. XXXIX. † *Ibid.* p. 197. Pl. XLVI.
VOL. II. 3 A

and to have contained four, or even five rooms more, similar to these;—yet *such dimensions* fall far short of that idea of grandeur, which we have been so very ready, through early prejudices, to annex to Roman edifices.—And in short, every thing we observe seems to confirm the just doubts of Mr. *Essex*,* concerning the supposed magnificence of Roman buildings in Britain.

What just conclusion can we then form, either with regard to the words of *Tacitus*, when he tells us that the Romans, under the direction of *Agricola*, built *Portico*'s, and *Baths* in Britain;†—or from the words of *Giraldus Cambrensis*,‡—when he speaks, in such high terms, of *immense*, and magnificent buildings of the Romans, at *Caerleon*?—what conclusion can we form?—but that, although those were indeed wonderful edifices both for ornament, and for comfort, in the eyes of the rude unpolished Britons; yet that, *in general*, they were at best no ways superior to such mansions, as those that have been traced out at *Mansfield Woodhouse*, or at *Netherby*;—which were, nevertheless, in all probability, to be classed with the most distinguished of any in the whole island.

Whilst as to what *Giraldus* (who wrote about the reign of Henry the Second,) says of the *Turrim Giganteum*, at *Caerleon*, it will easily be perceived, by any one who has been upon the spot, that this *Gigantic Tower* must have meant, not any building properly of a *Roman construction*;—but some great *round Keep*, built upon the summit of the high mount, that even still remains.—Some structure, that might possibly have been even first, in *Phœnician British* ages, upon a design somewhat like that at *Launceston*, in *Cornwall*; erected upon an hill partly natural, and partly artificial; and afterwards a greatly extended circular *Norman Keep*.

And now, with regard to the remains of those that really were *Roman buildings*, it ought to be remarked, that it has been too commonly a mistake of antiquaries, when *hypocausts*, (or floors of apart-

* *Archæologia*, Vol. IV. p. 79.

+ *Vita Agricolæ*, cap. 21.

‡ *Lib. i. cap. 5. p. 836.* Videas hic multa pristinæ nobilitatis adhuc Vestigia; Palatia immensa aureis olim tectorum fastigiis, Romanos fustus imitantia, eo quod a Romanis principibus primo constructa, et ædificiis egregiis illustrata fuissent: Turrim giganteum: Thermas insignes: Templorum reliquias; et loca Theatralia muris egregiis partim adhuc extantibus, omnia clausa.

Fig. 1.

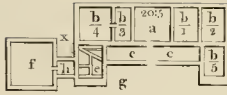


Fig. 2.

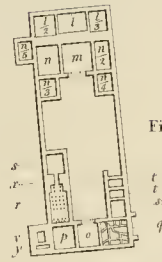
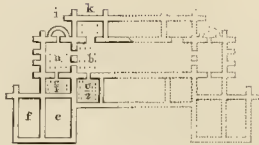


Fig. 3.



S



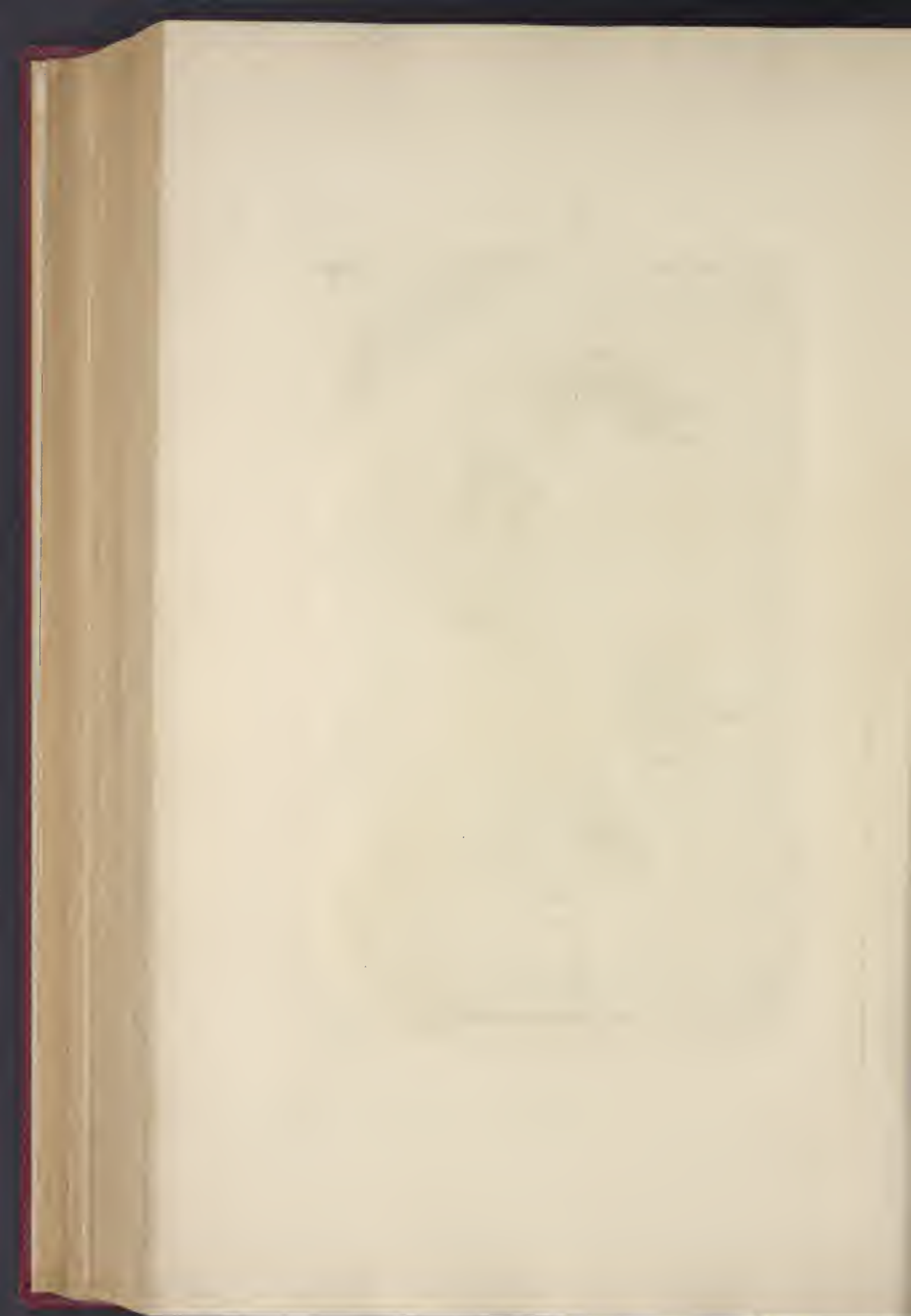
N

Fig. 4.

Plans of Remains of Roman Buildings in Britain.

Ed. del.

Ed. del. orig.



ments with flues under them for the conveyance of heat)* have been discovered, to conclude them always to have been *Roman baths*; and

* These *hypocausts*, with their flues for the conveyance of heat, it is well known were of two kinds:—sometimes they were constructed of small pillars, either square or round, a little more than 2 feet high, and placed sometimes about 1 foot asunder, and sometimes nearer, supporting the tiles or stones on which was laid the cement for forming the tessellated floor of the apartment;—and sometimes they were constructed of flat stones, or of tiles, laid one upon another, each projecting a little further than that under it, and by that means forming something like an arch, so as to have the space of each flue between them much narrower at the top than at the bottom, leaving indeed not more than 6 inches at the top, on which either a tile, or flat stone was laid across, as the first foundation, either for a stucco, or tessellated pavement.

When the pillars were of *brick*, those that were square, were composed of flat bricks (about 8 or 9 inches square) laid one upon another, with mortar between;—and those that were round, were composed sometimes of flat round tiles laid just in the same manner, and sometimes of semicircular tiles placed two in each row, with their flat edges put together, only so as to have the joining of the two tiles in one row placed alternately at right angles with the joining of those immediately beneath them.

A delineation of a most curious Remain of the former kind, discovered at Lincoln, with brick pillars, fully elucidating the whole nature of the construction of these *hypocausts*, may be seen in the *Vetusta Monumenta* (Vol. I. Pl. LVII;) and also in the *Philosophical Transactions*, No. 461. p. 855, and in Martyn's Abridgment, Vol. IX. p. 455.

It consisted of small pillars, some square, and some round; placed about one foot asunder in four rows. The former, which stood in the two middle rows, being 8 inches square; the latter, which stood in the two side rows, about 11 inches in diameter; and the shafts of each being about 2 feet high, with a projecting brick 11 inches square as a base, and another projecting square brick as a capital, making the whole of each pillar 26 inches high; on which rested the larger bricks (2 inches thick, and from 17 to 19 inches square), serving as a foundation for the tessellated pavement above.

The square pillars were composed of thirteen courses of square bricks; and the round ones of ten courses; the latter consisting each of two semicircular bricks, having their joining in each alternate course, the one placed at right angles with that in course beneath, whilst the mortar that cemented the parts of every pillar was clumsily, and rudely spread; and much blackened by the smoke, that had issued from a furnace, placed on the outside, at one end; and had passed out through two flues for the conveying of it away, under another adjoining apartment.

An account also of an *hypocaust*, the round brick pillars of which were composed of entire round bricks, may be seen in the *Archæologia*, Vol. VI. p. 11. It was discovered at *Caerleon*, in 1755;—and the bricks forming the pillars, were about 4 inches thick, and 14 in diameter, and piled one on the other like cheeses. See also Vol. II. p. 6.

The instances where the pillars, instead of being of brick, had been formed of hewn stone, are also by no means uncommon.—Delineations, and descriptions, elucidating this fact, may be seen in the *Military Antiquities*, p. 197. Pl. XLVI;—and also in *Cough's Camden*,

to call such remains constantly by that name ;—not recollecting that from the time of *Nero*, as *Seneca* informs us, the custom of warming other rooms in this manner was brought into general use ;*—and that *Pliny the younger*, in the description of his *Laurentine villa*, and of his own apartment that he most delighted in, describes his chamber as being so warmed ; with the advantage of a little narrow aperture, which could be opened or shut at pleasure, to increase or diminish the heat.†

If however *Pliny*, in the mild climate of *Italy*, was glad to avail himself of this advantage, for his own private apartment ; how much more is it likely that Roman officers, in this chilly island, should do the same ?

Without hesitation, therefore, we may rather conclude, that of

Vol. III. p. 245, 310 : and in the *Archæologia*, Vol. IX. p. 327. Pl. XXI, XXII ; where, in an *hypocaust* discovered at *Wroxeter*, in 1788, they were found made of fragments of columns of granite, and of red stone, about 14 inches in diameter, which had before been used for some other purpose, and were of such irregular lengths, that in some the deficiency was supplied by tiles placed one upon another on the top of them ; and in this *hypocaust* also, there was much irregularity both in the distances, and in the placing of the pillars.

In some instances, hollow brick pipes have been found, all round the side walls of the *hypocaust*, with openings on their sides, for admitting the heat ;—and with other openings at the top, for conveying it, sometimes through double walls of an apartment above ;—and sometimes, under other adjoining apartments ; of which a specimen may be seen in the *Philosophical Transactions*, No. 306. p. 2226 ; and in *Jones's Abridgment*, Vol. V. Part II. p. 61.

As to the latter kind of *hypocausts* ; those where the flues were constructed not by means of little pillars, but as a sort of little low galleries, with the side walls approaching nearer at the top than at the bottom ; some of these conveyances of heat were built of stone, and plastered within, and were even 4 feet high, and 1 foot 11 inches wide at bottom, though only 6 inches wide at the top ; and the nature of them may best of all be understood, by consulting the very curious Plates of Mr. *Lysons*, in his antiquities of *Woodchester*, Pl. XXIII, XXV, XXVII, and p. 5, 7, and 13, where it will further be seen, that these flues had at the ends of some of them (just as in one of the former instances) upright funnels, for the conveying of heat up by the side walls, and thereby increasing the warmth of the apartment over the *hypocaust*, and also for the conveying of the smoke up to the top of the building.

In some instances also it appears that small funnels, or brick pipes, were placed horizontally under the floors.

* *Seneca*, Ep. 90. + *Plin.* Ep. lib. ii. Ep. 17. *Applicuitur est cubiculo hypocaustum per exiguum, quod angusta fenestra suppositum calorem, ut ratio exigit, aut effundit, aut retinet.*

the *hypocausts*, so undistinguishably taken for *Roman Baths*, some were neither more nor less than private dwelling apartments.

And to this conclusion we may venture to add, that the fact, in reality, seems to have been ;—that sometimes to mansions, which were in the first instance designed for the particular residence of *Public Officers*, were added the appendages, of public places of resort ;—as *Public Baths* ;—*Public Halls* ;—and *Portico's* ;—all of them as instances of *designed Public benefit*. For this will best elucidate, in the fullest manner, both the words before cited from *Tacitus*, concerning the *benefits* bestowed on the Britons by *Agricola* ;—and will also best agree with the information we obtain from an inscription dug up at *Langchester*, in the Bishoprick of *Durham* ; that mentions, —*Balneum cum Basilica,* a Bath with a public Hall*, erected by *Cneius Lucilianus*, the *Proprætor* of *Gordian the Third*.

Nor is there any thing even in the very complete, and curious discovery, of Roman grandeur made by Mr. *Lysons*, at *Woodchester*, that can lead us justly to any better apprehension of Roman magnificence :—though it is impossible not to be struck, at first sight, with the apparent stateliness, and extent of those Remains.

There were doubtless in the very interesting building, at *Woodchester*, which he has so admirably described, larger apartments, and more in number, than in those *Villas* that had before been discovered.—But then it should be taken into consideration at the same time, that this Remain at *Woodchester*, is without exception acknowledged, to have been the only Roman mansion of *so great magnificence*, that has by any means been traced out in this Island ;—and that Mr. *Lysons* himself, after the whole of his investigation, has with the soundest judgment, deemed it to have been a *Public Building* of the highest distinction ; and designed for the residence of a *Governor* of a province ;—or perhaps more probably, for that of a *Proprætor*,—or even of the *Emperor himself* :—and from many parts of the architecture, he seems very rightly to have concluded it to have been built by the order of *Adrian*, ‡ who unquestionably was in Britain.

If then, this was the case, the fair and final conclusion must be, that *this one* structure had hardly any rival ;—was the noblest of

* See *Phil. Trans* Vol. XXX. No. 557. p. 823. Jones's *Ab.* Vol. V. p. 52.

† *Lysons' Antiquities at Woodchester*, p. 17.

‡ *Ibid.* p. 20.

the kind, existing in this country;—and *such*, as that from it no inference, as to number, or dimensions of apartments, can fairly be drawn, with regard to any other Roman dwellings in *Britain*.

Yet, after all, and with all this real superiority, we find here not more than eleven, or twelve rooms, in the principal part of the building, that could in these present days be on any account called good ones:—and there is no reason, from any remaining traces, of any sort or kind, to suppose that there was ever a staircase in any part; or so much as one single room above the ground floor.

For the sake of explaining the whole a little more fully, an outline upon the same scale with the preceding plans, is added in due proportion, Pl. $\frac{\text{xxviii}}{9}$, of this antient *Roman Palace, at Woodchester*, from Mr. *Lysons's* accurate survey;—and, at the same time, it cannot but be wished, that every one who peruses these pages, would consult the Plates of that excellent Work itself; as the doing so, will only the more strongly confirm all these observations.

For the more faithful and close explanation of the whole, the same references, by numbers, are preserved, which Mr. *Lysons* has given us; and all the letters of reference, that he had added:—but for the further necessary elucidation of the observations now made, a different order of description is observed.—And as Mr. *Lysons* has justly avoided placing gates of entrance, or door ways, in any parts of his plan; where the low buried foundations run on in so continued a manner, as to leave no positive traces of any such; and has only named what appeared to him to have been obviously the great entrances of the two great courts;—the same rule is now observed; leaving it to common sense to suggest, on which side of any apartment *such* door-way may have been, as must have existed on some one side or other.

But first, in order to verify the fact, concerning the smallness, and strange disproportion of the rooms in Roman houses, it may be proper to give a regular table of the dimensions of all the apartments, corresponding with the numbers marked in the plan.—Those dimensions are as follows:—

| No. | Feet. | Inches. | | Feet. | Inches. | No. | Feet. | Inches. | | Feet. | Inches. |
|---------------|-------|---------|----|-------|---------|-----|-------|---------|----|-------|----------|
| 1 | - | 48 | 10 | by | 48 | 10* | 25 | - | 51 | 0 | by 38 0* |
| 2 | - | 114 | 0 | - | 10 | 0 | 26 | - | 46 | 0 | - 38 0* |
| $\frac{2}{2}$ | - | 62 | 5 | - | 9 | 2 | 27 | - | 38 | 0 | - 38 0* |
| $\frac{2}{3}$ | - | 62 | 5 | - | 8 | 5 | 28 | - | 24 | 0 | - 13 6 |
| 3 | - | 19 | 3 | - | 13 | 8 | 29 | - | 24 | 0 | - 12 6 |
| 4 | - | 19 | 3 | - | 13 | 8 | 30 | - | 24 | 0 | - 8 0 |
| 5 | - | 20 | 4 | - | 7 | 6 | 31 | - | 35 | 0 | - 25 7* |
| 6 | - | 19 | 3 | - | 13 | 8 | 32 | - | 26 | 5 | - 21 0* |
| 7 | - | 19 | 3 | - | 13 | 8 | 33 | - | 13 | 6 | - 6 11 |
| 8 | - | 28 | 4 | - | 7 | 6 | 34 | - | 14 | 6 | - 6 0 |
| 9 | - | 20 | 10 | - | 20 | 2* | 35 | - | 14 | 6 | - 12 7 |
| 10 | - | 20 | 10 | - | 20 | 10* | 36 | - | 21 | 0 | - 17 6* |
| 11 | - | 20 | 0 | - | 6 | 0 | 37 | - | 21 | 0 | - 10 0 |
| 12 | - | 20 | 0 | - | 12 | 8 | 38 | - | 13 | 7 | - 9 4 |
| 13 | - | 9 | 10 | - | 7 | 10 | 39 | - | 9 | 10 | - 8 10 |
| 14 | - | 20 | 0 | - | 7 | 10 | 40 | - | 11 | 6 | - 8 1 |
| 15 | - | 16 | 8 | - | 9 | 10 | 41 | - | 24 | 0 | - 14 0* |
| 16 | - | 20 | 0 | - | 16 | 8* | 42 | - | 42 | 9 | - 9 4 |
| 17 | - | 20 | 0 | - | 17 | 2* | 43 | - | 65 | 8 | - 10 4 |
| 18 | - | 17 | 2 | - | 9 | 10 | 44 | - | 10 | 9 | - 10 4 |
| 19 | - | 9 | 10 | - | 6 | 0 | 45 | - | 12 | 6 | - 10 9 |
| 20 | - | 20 | 0 | - | 6 | 0 | 46 | - | 48 | 0 | - 7 5 |
| 21 | - | 24 | 4 | - | 9 | 10 | 47 | - | 19 | 8 | - 17 7 |
| 22 | - | 24 | 4 | - | 20 | 0* | 48 | - | 19 | 8 | - 8 6 |
| 23 | - | 13 | 10 | - | 11 | 0 | 49 | - | 19 | 8 | - 8 6 |
| 24 | - | 11 | 0 | - | 9 | 7 | | | | | |

These three, 47, 48, 49, seem to have been foundations of a great gate of entrance with three arches, the side ones having been each about 4 feet wide.

By some little mistake in the plan, there is No. 49, twice over; therefore on the west, or rather north-west wing, is again - - 49 - 78 0 - 13 0

Out of which last seems to have been taken another and small apartment, at the north-west end, without any number. - 13 0 - 11 9

| | | | | | | | | | | | |
|----|---|----|----|---|----|----|----|---|-----|---|-------------|
| 50 | - | 23 | 0 | - | 15 | 0* | 58 | - | 34 | 0 | - 10 6 |
| 51 | - | 15 | 0 | - | 11 | 9 | 59 | - | 105 | 0 | - 20 9* |
| 52 | - | 15 | 0 | - | 11 | 9 | 60 | - | 39 | 4 | - 20 6* St. |
| 53 | - | 32 | 10 | - | 11 | 9 | 61 | - | 35 | 6 | - 5 4 |
| 54 | - | 21 | 5 | - | 11 | 9 | 62 | - | 35 | 6 | - 10 5 |
| 55 | - | 23 | 0 | - | 21 | 5* | 63 | - | 35 | 6 | - 31 2* St. |
| 56 | - | 63 | 0 | - | 23 | 0 | 64 | - | 45 | 0 | - 35 6* St. |
| 57 | - | 62 | 0 | - | 10 | 6 | | | | | |

And here we may perceive, that of all these apartments, at least sixty-five in number, there are but nineteen, (which are those marked with asterisks,) that can be deemed of any tolerable proportions;—

and of those nineteen, *three*, namely, No. 60, 63, 64, seem obviously to have been stables;—and No. 59, seems to have been a place of exercise for the domestic servants, and slaves;—whilst No. 25, 26, 27, seem to have been *rather public apartments*, a *Sacellum*, *Hall*, and *Basilica*, than any private ones belonging to the house;—and No. 56, seems rather to have been a small *open court*, or *Atrium*, answering to that in the other wing, (c) than any apartment at all:—in consequence of which circumstances, there will remain only twelve, that could be deemed handsome *private apartments*, in this great Palace;—in this, the most magnificent Roman building that has ever been discovered in this Island;—and which has so justly been deemed even the residence of *an Emperor*,—and indeed of the most magnificent, and most voluptuous Emperor, that had ever been then known in the world.

The entrance, to this palace, seems obviously to have been by a great gate-way, at (E), consisting of one great arch in the middle, and of two lesser arches, one on each side, (standing over the foundations No. 48, 49).—And the great arch of entrance may be concluded to have been at least about 12 feet wide;—whilst those on each side seem, by the void space at the foundation, to have been about 4 feet wide.

This entrance led into a great outer court, (B) or *Atrium Majus*, (sometimes called *Peristylum*) of 158 feet, by 141, which seems to have been laid with a coarse sort of terrace, that may remind us of the terrace used on the *Prætorium* at Richborough.

On the right hand side of this court, towards the north-east, seems to have been a wing, containing *Baths*;—consisting of a gallery at the entrance (No. 43,) of 65 feet 8 inches, by 10 feet 4 inches;—of an apartment from it, (No. 41,) of 24 feet, by 14, (in which was found a curious stone weight);*—of another sort of gallery (No. 42,) of 42 feet 9 inches, by 9 feet 4 inches, (in which was found the leg of a statue of white marble);† and under which are remains of walls (marked by dotted lines) that seem to have supported a floor, whilst possibly it was warmed somewhat from the adjoining hypocaust.—And then followed an *Apodyterium*, or dressing room, (No. 38,) 13 feet 7 inches, by 9 feet 4 inches, with an adjacent *Laconicum*, or

* Antiquities at Woodchester, p. 16.

† Ibid. p. 12.

sweating room, (No. 39,) 9 feet 10 inches, by 8 feet 10 inches; and a long narrow passage only 4 feet 5 inches wide, leading to the Bath, (No. 40,) 11 feet 6 inches, by 8 feet 1 inch; whilst the *Præfurnium*, or stove for fire, was placed between the sweating room and bath.

In the centre of this wing seems to have been an *Atrium*, or little open court (c);—and at the south-east end of this open court were apartments, one of which, at (g), (if it was not a very odd angle of the court, as Mr. Lysons appears to have deemed it) seems to have formed a room of somewhat more than 20 feet, by 10 feet 9 inches, wherein, at (g), remain six large ashler stones, forming what seems to have been a sort of large pedestal, about 5 feet high, probably for a statue. From this room were three other apartments;—(No. 46,) a gallery, 48 feet, by 7 feet 5 inches;—and from thence one apartment, (No. 44,) 10 feet 9 inches, by 10 feet 4 inches, which may have been a cold bath;—and another (No. 45,) 12 feet 6 inches, by 10 feet 9 inches.

On the other, the left, or south-west side of the great court (B), was a wing that seems to have been destined to contain the apartments for the menial servants, and slaves:—and the rather, because no remains whatever of mosaic pavements, were found here.*

It seems to have consisted of a porch of entrance, at (h), 11 feet 9 inches, by 10 feet 9 inches;—of an *Atrium*, or little court, (No. 56,) 63 feet by 23;—of a great servants' hall, or place of exercise for domestics, (No. 59,) 105 feet, by 20 feet 9 inches:—and of a sort of dormitories, or apartments for their sleeping, (No. 49, 50, 51, 52, 53, 54, 55,) and perhaps, as a necessary addition, on account of their numbers, (No. 60.)

From the great *Atrium Majus*, or Outer Court, was an approach to the *Atrium (A)*, (the Inner Court of this Palace, similar to the only court of a common Roman house, only much larger);—and its entrance seems to have been by means of a portal at (f); and a Vestibule 9 feet wide, and 38 in length.

Ranging round three sides of this court, was a *Crypto-porticus*, or open walk, whose roof had probably been supported by pillars like a *Piazza*; and which had a tessellated pavement.—This on the north side, was 114 feet in length, and about 10 feet in breadth,

* Antiquities of Woodchester, p. 11.

(only narrowed to 9 feet, where the wall of the principal apartment projects into it):—on the west side it was 62 feet 5 inches, by 9 feet 2 inches;—and, on the east side, 62 feet 5 inches, by 8 feet 5 inches.—Under this were some flues;—and remains of fire places, that seemed to have served for heating them, were found both at (u), and (l).

On the north part of this magnificent *Crypto-porticus*, and fronting the gate of entrance, was the principal apartment; the state *Triclinium* (or dining-room),—which perhaps Vitruvius would have called the *Cavedium Tetrastylon*,*—(No. 1,) 48 feet 10 inches square.—It had manifestly four pillars to support its roof, or dome, that most probably was constructed by means of diagonal vaultings, resting on the four columns.—It had large flues under the floor, for warming it;† crossing each other at right angles;—and its pavement was tessellated, and of the richest kind;—composed of squares within squares, on the *outside* of the pillars,‡ and of circles within circles, on the *inside*, inclosing an octagon compartment, that had been adorned (like two of the circular spaces) with figures of animals, whilst they were bordered by the *Vitruvian scroll*, the *braided Guilloche*, and the *Labyrinth fret*;§—and in a distinguished space intersecting the inner compartments, and fronting the great court, was a figure of Orpheus (as it has been deemed,) playing on his lyre; but which I am rather inclined to consider as having been rather designed to represent that of *Apollo*.||

* Antiquities at Woodchester, p. 17. † Ibid. p. 5. ‡ Ibid. Pl. X.

§ There is every reason to believe this, which is one of the most elegant, to have been also one of the most antient ornaments in the world; as it may be traced up to ages before the records of history; and is found common to different nations who could hardly, by any possibility, have had any intercourse with each other since the first dispersion, till the nautical discoveries of these latter ages of the world have made us acquainted with them.—It is found upon the well known *Tuscan Vases*, fabricated long before the foundation of Rome;—it is found upon *the cloths of the South-sea Islanders*, separated from all intercourse with mankind till this last century;—it is found upon the *Vases* of the native *Mosquito Indians* of America; (of which a specimen may be seen in the *Archæologia*, Vol. V. p. 319. Pl. XXVI. fig. 3.)—It is found common amongst the *Chinese*;—and also in *Japan*.—These facts go very near to the tracing it up, at least to days of Noah;—and I could almost be inclined to call it *Eve's pattern*.

|| My reason for this conclusion is, because it is well known that *the Apollo* was sometimes the distinguished name of a principal and best *Triclinium*, or dining apartment;—of

The bases of the pillars were nicely placed, within the inmost corners of the squares, so as not to interrupt the continuation of the ornaments;* and near every one of them, in each of the void angular spaces between the two sets of square and circular borders, were two cumbent female figures.

The *tesseræ*, of which this elegant floor was composed, appeared manifestly to have been laid down rough,† and then rubbed smooth; and were in general cubes of $\frac{1}{2}$ an inch;—the colours, blueish gray, —red,—white,—and brown,—in several shades.

And it ought not to be passed by unnoticed, that near the north-east corner, the pavement appears to have been discoloured by fire, in a manner that may lead us to suspect that the superstructure was really principally of wood.

On each side of this, the most magnificent room in the whole mansion were two small galleries:—the one (No. 8,) 28 feet 4 inches,

which we have a remarkable instance given us by *Plutarch*, in his *Life of Lucullus*, (Florence Greek Edition, fol. 63, 2).—There had been some little difference between Pompey, and Lucullus:—“but *Pompey* and *Cicero* meeting *Lucullus* one day by accident in the Forum, “*Cicero*, after he had saluted him, asked him, if he would receive a visit from them?—and “upon his saying, *with the greatest pleasure*; and entreating them *when it might be*?—This “very day, said *Cicero*, provided you will give us for supper only what is prepared of “course.—*Lucullus* would have evaded it, and wished them to change the day; but they “declined they would neither change it, nor suffer him to give any orders to his servants “to have any thing further added to what he was to have himself;—and, upon his earnest “entreaties, only just allowed him to speak to one of his servants *in their presence*; when “his words were, *ὅτι σήμερον ἐν τῷ ἀπόλλωνι δειπνήσεις, to day supper in the Apollo*.—This “was the name of one of the best rooms in the house, and by this means he outwitted them; “—for to each dining apartment was fixed the stated expence of the supper therein, and its “own supply of provisions, and its own mode of preparation, and adornment.—When “once therefore the servants heard *where* he would sup, they knew what expence, and what “setting out the supper should have; *ἐὼθει δὲ δειπνεῖν τῷ ἀπόλλωνι, πέντε μυριάδων*; and he “was accustomed *to sup in the Apollo for five ten thousand*, (for fifty thousand sesterces, some- “what more than £. 400, reckoning the sestercius at *1d. 3q. $\frac{3}{4}$*); and so much was expended “in that entertainment.—*Pompey*, (*Plutarch* adds,) was astonished at the greatness of the “banquet, and the quickness of its preparation.”

* Nothing can exceed the accuracy, and beauty of Mr. Lysons's representations of this pavement, in Pl. VII, VIII, IX, X.—The beds of cement on which it was laid, have been particularly mentioned (p. 173); and it was observed, that the cement, between the *tesseræ*, was more difficult to break than even the *tesseræ* themselves.

† *Antiquities of Woodchester*, p. 4.

by 7 feet 6 inches; the other (No. 5,) 20 feet 4 inches, by 7 feet 6 inches;—both of which had mosaic pavements.

The former, (No. 8,) on the south-west side, seems to have led to the winter apartments:—for at the end of it we find, (No. 10,) a room 20 feet 10 inches square, which not only had flues under its tessellated pavement, for the conveyance of heat; but also double walls on one side, at the distance of 6 inches from each other, both for preservation from damp, and for still further increase of heat.—The ornaments of its floor consisted not only of figures in compartments,* but had an inscription in two of the divisions, at the two opposite corners, which from what remains, seems to have been, *BONUM EVENTUM BENE COLITE*; and is remarkable for a *Grecism*, not very uncommon, that of using the letter (H) for an (E).—Its walls also, which were found remaining near 3 feet high, had been obviously covered with stucco, and painted in fresco.†

This therefore was most manifestly a *Triclinium Hybernium*, or winter dining room;—whilst No. 6, 7, 9, 11, 12, 13, 15, 18, seem to have been *Cubicula*, or bed chambers, and closets, such as are mentioned both by Pliny, and Cicero;—and to have had both tessellated pavements, and flues under them;—and are still more remarkable for the remains of the stoves, or fire places, on the outside of the walls, at (o), (u), and (k), whereby they were heated.

At No. 22, consistently with what may be remarked concerning the number, and different situations of the *Triclinia* in Pliny's villas, seems to have been another *Triclinium*, or dining parlour, 24 feet 4 inches, by 20 feet.

The rest of the apartments on this side, seem to have been *Cubicula*, and need no further mention, except that there appear, from a fragment of a wall, to have been still a few more of them towards the north-west.

The other little gallery that has been mentioned (No. 5,) seems to have led to the summer apartments, on the north-east side of the court, though even amongst these was one with an hypocaust (No. 31);—but the rest seem not to have had any such advantage, and yet several of them appear to have had mosaic pavements; and

* Antiquities of Woodchester, p. 7. Pl. XIX, XX.

† See Mr. Lysons' Pl. XXXI. fig. 1, 2, 3.

there were manifestly again more of these towards the north-east than could be exactly traced.—They seem to have consisted, like those on the other side, of two or three *Triclinia*, and of several *Cubicula*.

But what most demand our attention, are the apartments on each side the gate of entrance, on the north part of the court, or *Atrium*;—for *here* seem to have been such as were rather for public than private use. (No. 25,) the largest apartment in the whole building, 51 feet, by 38 feet, (which had its floor apparently for strength sustained by long walls, as marked by the dots, with flat stones upon them), seems to have been a sort of *Basilica*, or public hall;—and (No. 26,) 46 feet, by 38 feet, seems to have served as a Vestibule, or sort of porch;—whilst (No. 27,) 38 feet square, on the other side of the great entrance into the court, seems also to have served as a magnificent porch, or public entertaining room;—both of the latter reminding us unavoidably of those, where the numerous clients* of *Cicero* are said to have waited for him, before his going to the Senate-house.—And there is great probability that these apartments, like *Cicero's*, had a *Portico* in the front of them.

All these ideas are much confirmed, by the finding of so many marks of extraordinary adornment here;—such as slices of marble for incrusting of parts of the walls;—with other remains of parts of walls painted in fresco, even with inscriptions;—a Doric capital of a pillar, and a shaft of another column; and part of a pedestal; remains and fragments also of small statues; some of *Parian* marble;—two large coins of brass, one of *Adrian*, and one of *Lucilla*; and a considerable number of small brass coins of the Lower Empire.

On the outside of this Palace, at some distance, were the foundations of four other structures; (No. 61, 62, 63, 64,) which seem to have served as stables; and the rather, because it is very remarkable, that the breadths of two of them, (61), and (62), which were 5 feet 4 inches, and 10 feet 5 inches, answer very nearly to the

* It is well known that these numerous clients of the Roman Senators and Orators, were sometimes called *Atrientes*, on account of this very attendance in the *Atria* of such great men.

+ *Antiquities of Woodchester*, p. 9, 10, 11, 15. Mr. *Lysons*, p. 17, mentions these rooms, as being what *Vitruvius* called *Exedra*, and furnished with seats for conversation. *Vitruvius*, lib. v. cap. 11.

breadths of the spaces assigned, even in a camp, for the *arms*, and for the *bat horses*.

The other two larger parts of this out-building were, the one (No. 64), 45 feet, by 35 feet 6 inches; the other, 35 feet 6 inches, by 31 feet 2 inches.

Such was this great Palace;—but, in the whole extent of it, there has not been any thing traced, that could afford the least apprehension of there having ever existed any such thing as a *staircase*, in any part of it whatever.—And therefore, as the villas of the Romans, even in Italy itself, appear both from the intimation given us by *Pliny*, and from many other circumstances, to have been generally on one floor, we may justly conclude that this Palace was so too.

Seneca, speaking of the villas of the Roman Senators, says, that they had the appearance of a camp, rather than that of a *villa*; which accords exactly with this idea.

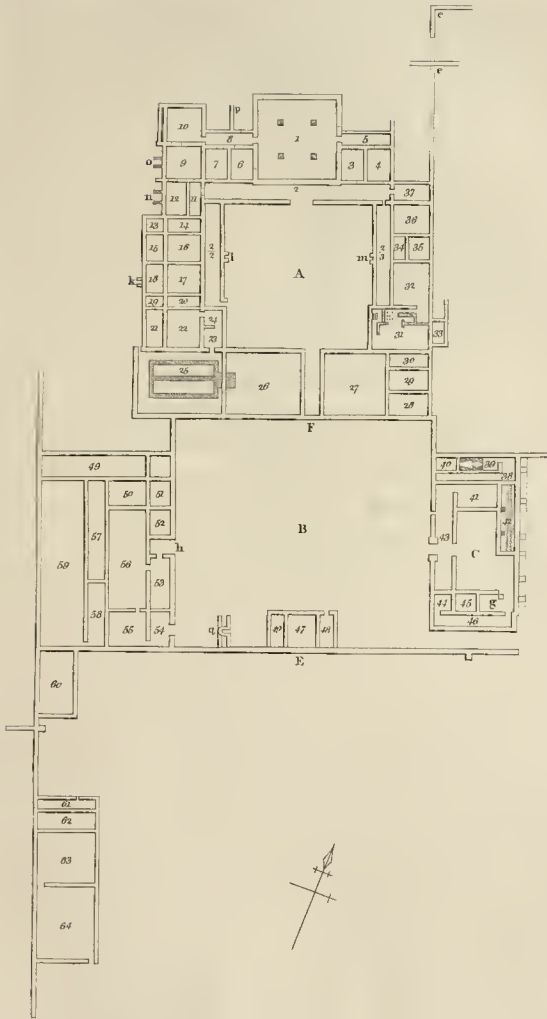
And indeed from the great number of *villas* possessed by *Cicero*;^{*}—his *Tusculum*;—*Antium*;—*Astura*;—*Arpinum*;—*Formian*;—*Cuman*;—*Puteolan*;—and *Pompeian*;—and others, to the number even of eighteen, according to some writers;—and from the ease, and rapidity with which *three* of them were rebuilt that had been demolished in his exile:—we must conclude that most of his *villas* could only have had such kind of apartments, all upon one floor.—

* The number of his *villas* may be collected from a great variety of passages, in his *Familiar Epistles*, and in his *Epistles to Atticus*,—to his brother *Quintus*,—and to *Brutus*;—and from the mention made of some of his villas even in his *Philosophical works*.—See also *Middleton's Life of Cicero*, Vol. I. p. 450, quarto;—and Vol. II. p. 509, 511.

And a little anecdote related by *Plutarch* of *Lucullus*, both illustrates the fact of the numerous *villas* possessed by others of the Roman Senators; and also of the *slightness* of those edifices; and of their wanting sometimes necessary warmth, and protection from the little inclemency even of an Italian winter.

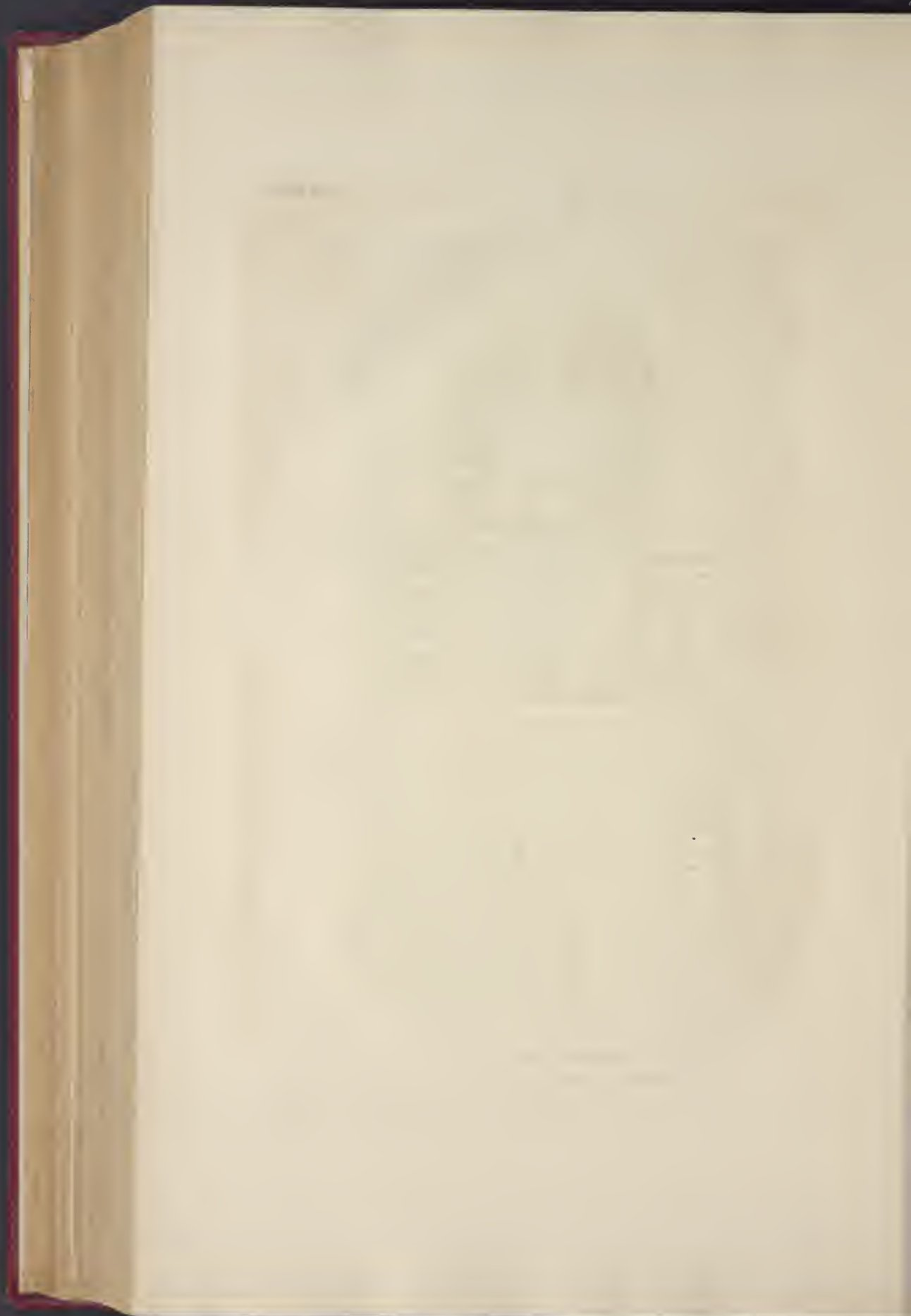
“*Pompey* paying *Lucullus* a visit, in one of his *villas*, blamed him for making his house “so delightful in summer, and yet, ἀόικητον ἐν χειμῶνι, uninhabitable in the winter: to which *Lucullus* replied; *Think you I am less provident than cranes and storks, and that I know not, as they do, how to change my habitation with the season?*” *Florence Gr. Edit.* fol. 63. *Dryden's Edit. Eng.* Vol. IV. p. 403.

Pliny the Younger also had at least, his *Tuscanum*;—his *Tusculum*;—his *Tyber*;—and his *Præneste*.—*Plinii Ep. lib. v. Ep. 6. Habes causas, cur ego Tuscos meos, Tusculanis, Tiburtinis, Prænestinisque meis præferam.*



*Plan of Roman Villa at Woodchester.
from the Plan, on a larger scale, by M. J. Lyons, with his permission.
Published as the Act Director, June 21, 1906*

Scale 1/4 in.



The rapidity also with which his *Tusculan Villa*, his most favourite residence, was rebuilt, after he had changed a determination he once had to part with it, intimates the same thing:—and so indeed does even the circumstance, that his *Puteolan* house was built after the plan of the *Academy at Athens*, and adorned with a *portico*, and grove.

His very interesting account also of his repairs, and alterations, at one of them, in his letter to his brother *Quintus*,* leads us to the same conclusion.—And the curiosity of that short description, renders it useful to be even transcribed at large on the present occasion;—especially as he so particularly mentions therein the *Atrium*, (or little side court), as distinct from the usual *Atrium*, or proper court of the house, that was surrounded by the pent covering, and tessellated pavement, so evidently forming a *Crypto-porticus*.

“ Villa mihi valde placuit, propterea quod summam dignitatem
 “ *pavimentata porticus* habebat: quod mihi nunc denique apparuit,
 “ posteaquam et ipsa tota patet, et columnæ politæ sunt. Totum in
 “ eo est (quod mihi erit curæ) tectorium ut concinnum sit. *Pavimenta*
 “ recte fieri videbantur.—Cameras quasdam non prohavi mutarique
 “ jussi.—Quo loco in porticu te scribere aiunt ut *atriolum* fiat, mihi,
 “ ut est, magis placebat. Neque enim satis loci esse videbatur *atriolo*:
 “ neque fere solet, nisi in his ædificiis fieri, in quibus est *atrium*
 “ *majus*: nec habere poterat adjuncta cubicula et ejusmodi membra.
 “ Nunc hoc vel honestate *testudinis*, vel valde boni æstivum locum
 “ obtinebit; tu tamen si aliter sentis rescribe quam primum. In
 “ balneariis assa in alterum apodyterii angulum promovi, propterea
 “ quod ita erant posita, ut eorum vaporarium, ex quo ignis erumpit,
 “ esset subjectum cubiculis. Subgrande cubiculum autem, et hiber-
 “ num altum valde probavi, quod et ampla erant, et loca posita
 “ ambulationis uno latere, eo, quod est proximum balneariis. Co-
 “ lumnas neque rectas, neque e regione *Diphilus* collocarat, eas
 “ scilicet demolietur. Aliquando perpendiculo et linea discet uti.
 “ Omnino spero paucis mensibus opus *Diphili* perfectum fore.”

The *VILLA* pleased me much, because the paved mosaic portico had the utmost dignity; which has now at last appeared to me, after that both the whole of it is become ostensible, and the columns are polished. All the

* Epist. ad Quintum Fratrem, lib. iii. Ep. 1. sec. 1.

plaster (which will be of consequence to me) is in such a state as to be quite compact; the pavements (or stucco floors) seemed to have been made level; some of the apartments I did not approve of, and ordered to be altered; in the part of the portico in which they say you write that there should be a LESSER ATRIUM (A LITTLE COURT), it pleased me better as it is; for there neither seemed to be room sufficient for a LESSER ATRIUM (A LITTLE COURT), nor indeed is it usual that there should be such, except in those kind of buildings where there is the GREATER ATRIUM (of all): nor could it have the adjoining bed-chambers, and such kind of appurtenances.—Now (in its present state), this court, whether with regard to the handsomeness of the PENT COVERING, or of the very good kind of thing it is, will obtain the advantage of being a summer place; but yet if you think otherwise, write back as soon as possible.—In the baths, I have removed the sweating seats into another angle of the dressing-room, because they were so placed that their stove, from whence the fire proceeds, was under the bed-chambers;—but the great bed-chamber of all, and the winter LOFTY bed-chamber, I have very much been pleased with, because they were both spacious, and have places designed for walking situated on one side, and THAT on the side which is next the baths.—The columns Diphilus had placed neither upright, nor in the right place:—those, at least, he will demolish:—some time or other he will learn to attend to a perpendicular, and to a right line—Surely do I hope, that in a few months the work of Diphilus will become quite perfected.

It is remarkable, that the *Cubicula*, (the bed-chambers,) as well as the *Cameras*, (the smaller rooms,) seem evidently to have been here all on the same floor with the rest of the rooms, and with the *Baths*, and with the *Portico*.—And that a most particular attention seems to have been paid to the *plastering* of the rooms; which we may therefore conclude was here, as at *Woodchester*, the general adornment of the walls.—The manner also in which the former *irregularity* of the pillars of the handsome *pent*,* the *Crypto-porticus*, is spoken of, under which was the *tessellated pavement*, plainly shews, after all, that it was but a slight kind of building.

* One can scarce forbear to wonder at the incredible manner in which *Gravius*, and *Gronovius*, and other learned commentators, have hesitated about this passage; merely from not apprehending what the real plan of Roman houses, and the true nature of their *hypocausts*, was;—whilst nothing can well be more plain, than that the *testudo* Cicero speaks of,

What is intimated, in like manner, concerning the improvement of his fathers' beautiful villa, at *Arpinum*, in another part of his (*Cicero's*) writings, leads us to the same kind of conclusion concerning the real slightness of these structures.

This was originally small, like an antient *Sabine farm*;* till his father, who spent the latter part of his days there, enlarged it.—And even then, it seems to have been of no great extent, as we find his friend *Atticus*, when admiring the beauty of the place, preferring it to *magnificent villas, with marble pavements, and carved ceilings*.†

There is another short passage also, in *Cicero's* Epistles, which will fling some further light upon the history of the *small* kind of apartments which we find in the remains of Roman villas now discovered in this country.

Speaking of some additions to his *Tusculan villa*;—he says, ‡
 “*Exhedria quædam mihi nova sunt instituta in porticula Tusculani.*
 “*Ea volebam tabellis ornare. Etenim si quid generis istiusmodi me*
 “*delectat, pictura dilectat.*” *There are some new little entertaining*
rooms formed for me, in the little portico of my TUSCULUM. I wish to
adorn them with pictures; § for if any thing of that kind delights me,
painting does. In which passage, it has been accurately noticed by *Crævius*, with what obvious marked design *Cicero* makes use of expressions of *diminutiveness*, in the words *Exhedria*, || and *Porticula*, to distinguish these apartments from large *Exhedra*, or great rooms for the reception of guests, and from splendid porticos.

On this occasion, therefore, it may be curious to add his short

was the *pent covering*, resting upon the pillars of the *Crypto-porticus*, surrounding the court; though it be true, that the *tiled covering of the flue of an hypocaust* under the floor of an apartment, was sometimes denominated by the same word *testudo*:—but to apply the word *testudo* here, either to the covering of the flue, or to the mosaic pavement itself, would surely be making *Cicero* guilty of a most gross repetition, after what he had said before, of *pavimentata porticus*, and *pavimenta*, the *tessellated portico*, and the *pavements*.

* *Antiquo more parva esset Villa, ut illa Curiana in Sabina.*

† *Satiari non queo: magnificasque Villas, et pavimenta marmorea et laqueata tecta contemno.*
De Legibus, lib. ii. sec. 1, 2, 3.

‡ *Epist. lib. vii. xxiii.*

§ What kind of pictures, and paintings these were, we may best learn from the curious accounts of those dug up at *Herculaneum*.

|| *Sunt autem Exhedria, diminuta a voce Exhedra.* *Verburgii Edit. Vol. IX. p. 394.*

Grecised account, of his, and his illustrious neighbour's, entertainment of *Julius Cæsar*;—in order to shew, in what manner all these kind of apartments were sometimes filled:—and indeed to compare that account with what may actually have passed in this very *villa*, at *Woodchester*, if the Emperor *Adrian*, (as there is good reason to believe) once took up his abode there.

“ O Hospitem mihi tam gravem! ἀμεταμέλητον, fuit enim perjucunde.—Sed cum secundis Saturnalibus ad Philippum vesperi venisset, villa ita completa militibus est, ut vix *Triclinium*, ubi cænaturus ipse Cæsar esset, vacaret: quippe hominum CIO CIO.—Sane sum commotus, quid futurum esset postridie: ac mihi Barba Cassius subvenit: custodes dedit. Castra in agro: villa defensa est.—Ille tertiis Saturnalibus apud Philippum ad horam VII. nec quenquam admisit;—rationes opinor cum Balbo.—Inde ambulavit in litore. Post horam VIII. in balneum: tum audivit de *Mamurra*: vultum non mutavit:—unctus est;—accubuit;—ἐμετικὴν agebat. Itaque et edit et bibit ἀδελῶς et jucunde: opipare sane et apparate: nec id solum, sed bene cocto et condito sermone bono, et si quæris, libentur.—Præterea tribus tricliniis accepti οἱ περὶ αὐτόν valde copiose. Libertis minus lautis servisque nihil defuit. Nam lautiores eleganter accepti.—Quid multa?—homines visi sumus.—Hospes tamen non is, cui diceres, amabo te, eodem ad me cum revertere.—Semel satis est;—σπουδαῖον ὄνειρον in sermone: φιλῶλογα multa;—quid quæris?—delectatus est et libenter fuit.*

Oh this guest of such anxiety to me!—yet not to be repented of;—for he was very pleasant.—But when he had first come to Philip's, on the evening of the second of the Saturnalia, the villa was so filled with soldiers, that there was hardly a TRICLINIUM (a dining room), unoccupied, where Cæsar himself might sup; as there were indeed two thousand men with him.—I truly was much disturbed how the matter might be the next day: but Barba Cassius came to me: set guards; appointed a camp in the adjoining field; and the villa was prohibited to them.—He (Cæsar) on the third of the Saturnalia staid with Philip till the seventh hour (one in the afternoon), and admitted no one. I suppose he had business to settle with Balbus:—after that he walked on the shore:—after the eighth hour

* Ad Atticum, lib. xiii. Ep. 52. The letter reminds one of the easy manner in which a modern man of fashion, and elegance, sometimes writes, in a stile half French, half English.

(two o'clock), went into the bath:—then heard of Mamurra, and did not at all change countenance:—was anointed;—took his nap (or siesto);—took an emetic;—and by that means ate and drank delightfully, and pleasantly:—plentifully enough, and bravely:—nor so only, but with well digested, and well framed discourse;—and (if you ask me), freely.—As to the rest, those about him, received in three TRICLINIA (dining apartments), ate very abundantly:—to the less distinguished freed-men, and to the slaves, nothing was wanting:—whilst as to the more distinguished (freed men), they were elegantly entertained:—why should I add more:—we have seen the men:—but this is not a guest to whom you would say, I shall be vastly delighted with you, when will you return to me in the same manner.—Once is enough.—There was nothing studied in his discourse;—and many things learned.—If you ask more;—he was delighted;—and all was with ease.

Perhaps, after the account of this entertainment, it may be a little anecdote which deserves not to be omitted, that Cicero was deemed remarkable for the elegance of his furniture:—and that a cedar table of his, was preserved to the days of Pliny, about one hundred and fifty years after, who speaks of it,* as a most remarkable circumstance, that Cicero should have given for this table, even in that early age, so great a price as ten sestertia (about £80. 14s. 7d. of our money.)

The *Triclinia* therefore we find were constantly used as dining rooms;—some of the larger apartments as *Exhedra*, or entertaining rooms, for conversation;—some of the smaller as *Exhedria*, or lesser entertaining rooms,—a sort of parlours;—and the other as *Cameræ*, and *Cabacula*, as cabinets for study, and for holding the rolls of their books; and for bed-chambers:—whilst some of the larger apartments, (as probably some of those, at Woodchester, both on the side where were the baths, and on that where the servants dwelt), must have been used as kitchens, and offices;—a circumstance that seems

* Plin. Hist. Nat. lib. xiii. cap. 15; his words are,—*Extat hodie M. Ciceronis in illa, paupertate, et quod magis mirum est, illo ævo emptæ HS. X.*—And at the same time he gives other instances of great prices being given for such;—and calls it *mensarum insaniam*, a table rage.

† Antiquities at Woodchester, p. 11. The *Amphoras* (or great jars), were used for preserving their wine; and as they could neither have the advantage of corks, nor close them

confirmed, by the finding two fragments of an *Amphora* in (No. 45), and part of a large dish of coarse earthenware; † besides fragments of glazed pottery in other parts; and indeed seems also to be confirmed, by the stile of the apartments at the east end of the second villa, at *Mansfield Woodhouse*, Pl. $\frac{\text{xxviii}}{8}$, fig. 2.

The principal, or State *Triclinium*,* which from its central situation communicated with many suits of rooms, was sometimes, on that account, denominated a *Cavædium*; to distinguish it from the other *Triclinia*, and it would perhaps in modern times be called a *Saloon*.

And not only was *this* made use of as a distinguished place of entertainment, on great occasions; but also the *Atrium*, or open court itself; which latter has, for that very reason, sometimes been confounded with the *Cavædium*.

This use of the *Atrium*, and indeed the very introduction of it, seems to have been derived to the *Romans*, with many of their other elegances, from the *Greeks*, who perhaps had it from the *Persians* and *Syrians*.

We find the plan of most, even of the private houses at *Pompeii*, † was an *Atrium*, (or square court), with a fountain in the middle, and small rooms all round; few of whose windows were towards the street;—and in these courts we have the utmost reason to believe they passed some of their most refreshing hours.—Whilst in great mansions, like this at *Woodchester*, it served for the splendid reception of a great assembly of people, on state occasions. ‡

well in the manner casks are secured, they used another, and perhaps a better method, that of keeping the surface of the wine continually covered by oil;—by which means it held good till the *Amphora* was entirely drained to the dregs.—In a *villa* discovered, buried under the ashes of *Vesuvius*, near *Pompeii*, in some of the rooms were found several such great *Amphoræ*, ranged against the wall.—*Archæologia*, Vol. IV. p. 172.

* No. 1, in Pl. $\frac{\text{xxviii}}{9}$.

† *Archæologia*, Vol. IV. p. 164.

‡ It was probably into just such a kind of *Atrium*, or court, that OUR BLESSED LORD was brought,—to appear before the Judgment seat of *Pilate*; who seems to have sat down on the *tessellated pavement* of the *Crypto-porticus*, called in Hebrew *Gabbatha*; §—whilst the horrible multitude of Jews, *the hired mob*, || to whom *Pilate* addressed himself, stood in the *Atrium*, (or *Judgment Hall*), of what was the *Prætorium* (or *Pilates' Palace*), and cried out,

§ John, chap. xviii. ver. 28, 29. chap. xix. ver. 9, 13.

|| Matthew, chap. xxvii. ver. 20, 22. Mark, chap. 16. ver. 11, 13.

Yet that the pillars supporting the surrounding CRYPTO-PORTICUS were even in these more stately mansions, generally slight, and mostly of wood, however carved, and adorned, may be inferred, not

Crucify him,—Crucify him;—and whilst their numbers shew that it must have been a very spacious area.

And in a mere private house of such construction, it seems to have been, that OUR LORD cured the man sick of the palsy, brought unto HIM, whilst HE was teaching in a small *Atrium*, or square court of a similar kind, and when those who bore their sick friend not being able, for the crowd, to carry him in through the inner door, conveyed him up to the flat roof of the house, and removing the awning (which oftentimes was spread over a part of these courts to fence against the noon-tide rays of the sun,) let him down, by ropes, over the parapet wall, built as usual *with tiles*; and placed him at OUR BLESSED SAVIOUR'S feet. (Mark, chap. ii. ver. 4.)

This incident has been admirably well illustrated, by Doctor *Shaw*, (in his *Travels*, p. 273, 277, fol. edit. (for the purpose of obviating the childish blasphemies of *Bolingbroke*, and of such rash and hasty writers.—And his account plainly shews, how this custom of building each house round a square open court, and of using *such a court* as a place for receiving numerous guests, existed in *Syria*, and in *Arabia*, as well as in *Greece*. Whilst it may be added, that an anecdote of *Marcus Crassus*, related by *Plutarch*, leads us even to apprehend at what precise period this style of building was probably first introduced at *Rome*.)

From the time that the city had been burnt by the Gauls, its streets were exceedingly narrow and crooked;—and the houses had been built up hastily, and mostly of timber;—and *Plutarch* tells us, “that *Crassus*, observing how subject the city was to fire, and the falling down of houses, by reason of their height, and of their standing so near together, bought slaves that were builders, and architects, and when he had gotten to the number of five hundred, he bought houses that were on fire; and those in the neighbourhood, which, by reason of the present danger and uncertainty, the old proprietors were willing to part with for little or nothing: so that the greatest part of *Rome*, at one time or other, came into his hands;—but he never built any thing except his own house for himself, and only hired out his slaves to those who had a mind to build; selling them as much ground as they had need of, and saying to his friends,—those that are addicted to building, will undo themselves soon enough without the help of other enemies.” (See the first pages of *Plutarch's* Life of *Marcus Crassus*.)

Even *Cicero* himself was one of those who bought of *Marcus Crassus*:—for of him he purchased his house at *Rome* on the *Palatine Hill*; adjoining to that portico of *Catulus*, that had been built out of the *Cimbrian spoils*. See *Middleton's* Life of *Cicero*, Vol. I. p. 249, 251, quarto. And it is a fact which claims some attention, that all the most elegant improvements of *Rome*, seem to have begun about the time of *Cicero*, and to have been at their highest state of perfection about the time of the *Antonines*.

It is very probable that *Cicero* even hired of *Marcus Crassus* some of his building slaves, and architects;—some of those very workmen whom he employed in repairing and altering his villas;—and that the blundering *Diplolus*, mentioned so jocosely in his letter to his brother *Quintus*, was actually one of these stipendiary builders.

The Royal Exchange of London (only that it is upon a much greater scale, and more

only from *Cicero's* account already mentioned, of the pillars so irregularly and blunderingly first placed by *Diphilus*; but also from those remarkable lines of Horace;—where, speaking even of the most splendid mansions, he so carefully uses, in his description of the *Atrium*, the word *postis*, instead of *columna*.

“ Cur invidendis *postibus*, et novo

“ Sublime ritu moliar *Atrium*?”

Carminum, lib. iii. Ode 1. 1. 45.

Why construct a magnificent ATRIUM, with pillars to be objects of envy?

The large outer court, from the time of *Vitruvius*, was sometimes called *Peristylum*, and was often surrounded by a Colonnade, much resembling the *Crypto-porticus*—Here, persons of all ranks, at all times had easy access;—and *here* probably were such *baths* as were *public*.—But into the *Atrium*, and much more into the *Triclinia*, *Cameræ*, and *Cubicula*, none had access, but on appointed occasions, and as guests, and friends of the master of the domain.

I have been thus minute in describing all these *Villas*, for the purpose of shewing *the very small dimensions of the rooms in general*;—and in order to render it the more evident, how greatly, after all that can be discovered concerning the habitations of the Romans in this island, they fell short of that high magnificence for which they have had credit;—and indeed of any of that real comfort and convenience that has been introduced in the buildings of these later ages.

In their own country the houses at *Pompeii*, which were discovered in so perfect a state, buried under the ashes of *Vesuvius*, were observed to have been uniformly built round *little square courts*, whilst the rooms themselves were in general *exceedingly small*;—being only from 10 to 12 feet square; or at most, and in a few

lofty) may perhaps help to convey somewhat of the idea of an Eastern house.—It was rebuilt after the fire of London, and finished in 1669;—and, as is apprehended, was rebuilt somewhat after the original plan of the old one; which had been reared by Sir Thomas Gresham, in 1567.

As, therefore, Sir Thomas was greatly connected with foreign countries, it is more than probable that the original hint of the whole was taken from the idea of Eastern *Bazars*, and *houses* conjointly:—for the walks *above*, with the shops, were almost true *Bazars*; whilst the court *below*, almost resembles that of some great house at *Smyrna*, or *Aleppo*.

instances only, about 14 or 18; (though indeed one was found* of 30 feet by 15,)—and it was also remarked, that they had windows only towards the square court, or garden, and hardly any towards the street;—and that the inner rooms were only lighted through such as were next the court, or else not at all.—And yet, that these were considered as apartments of consequence by the inhabitants, appeared from almost all of them having their walls and ceilings painted; and from their being adorned with tessellated pavements.

One of them, where an iron bedstead remained placed, was even so exceedingly small, that there was only a space of about 6 feet square;—and yet this also was elegantly painted, † and had a tessellated floor.

To all which it may be added, that indeed the idea given us even by *Pliny* himself, of what he deemed *Villas of great elegance*, in the neighbourhood of *Rome*, (though *Mr. Castell*, ‡ as well as *Scamozzi*, and *Felibien*, have endeavoured to make the most of it), does by no means authorize us to suppose that the Romans had it at all in their power to import into this country any much higher specimens of *domestic convenience, and comfort*, than those of which we have the remaining appearances, just referred to.

This assertion may appear incredible, to those who consider the beauty and magnificence of *Trajan's Pillar*; and of others of the public works of grandeur, of the age in which *Pliny* lived; or who reflect upon the private splendour that surrounded him;—the many country seats he possessed, on the borders of the *Larian lake* § and elsewhere;—and the truly refined and elegant manner in which, we are informed, he passed his time, at his two most favourite villas; ||—but yet, notwithstanding the prejudices we are apt to imbibe for *classic days*, in our earliest years; and for *Pliny's taste* in particular; it seems to be undoubtedly true.

* Page 170.

† *Archæologia*, Vol. IV, p. 164, 165, 170.—The preservation of the paintings on these walls at *Pompeii*, as well as the fragments remaining on the lower parts of the walls at *Woodchester*, prove the truth of the assertion of *Vitruvius*, (lib. xvii. cap. 3), that *colours laid with due attention, (or diligently) on wet plaster, do not fade, and are perpetually lasting*, whilst that observation of his explains to us *the very manner* in which these works were executed.

‡ See *Castell's Villas of the Antients*.

§ *Plinii Epist. lib. ix. Ep. 7.*

|| *Ibid. lib. ix. Ep. 36. Ep. 39.*

For even in that eloquent writer's description of his favourite and celebrated *Laurentine villa*; although he does indeed tell us of its three or *four* courts,* surrounded with porticos;—one of which courts was, he says, in the shape of the letter (O);—yet we may plainly discover, from a variety of circumstances, that none of these courts could be large, and that most of them must have been very small;—and that the porticos themselves were indeed little better than mere *Pents*; covering just such kind of long narrow pavements, as those which we have been describing.

And though indeed he mentions a very great number of rooms; amongst which it is strange to find there were so many different *Triclinia*, each of which he calls *Cœnatio*, a supper room: yet we plainly are led to understand, that the whole range of building, in general, was only *one story high*; or in other words merely a continued range on the ground floor;—both because he speaks of *two towers*, as being *extraordinary* parts of the *villa*; which nevertheless themselves were not so high as an ordinary modern house, (having only three stories each);—and also because, in his description, he never once mentions *any staircase* in the rest of the house, although he so particularly mentions (*scalæ*) staircases in his other description of his *Tuscan villa*,† where there really was a range of rooms over those upon the ground floor.

From a variety of circumstances also that he mentions, we are left to conclude, that the apartments were, for the most part, exceeding small.—And even with regard to those which we have been accustomed to consider as a sort of state rooms;—the *Triclinia*, (or dining apartments, as they would be called in these days), his *own* description of folding doors, or folding windows as large as doors, on *every side* of one of the best of them, gives us no very high idea of the style of their architecture;—any more than the contrivance, (mentioned by him as so very ingenious) of *an angle* formed between this room, and an adjoining *Cubiculum*, (or sort of bed-chamber) for the sake of collecting the rays of the sun, and augmenting the heat of both apartments.

Such, surely, was but an odd mode of procuring warmth:—to say nothing of the unpleasantness, of *this warm angle* so close to

* Plinii Ep. lib. xi. Ep. 17.

† Lib. v. Ep. 6.

to this entertaining room, being at the same time chosen, on account of such its warmth, as a place of exercise for the servants and slaves in winter.

We find indeed, that there were stoves, and flues for the baths; and for the use of one or two other apartments; and the contrivance for warming his own bed-chamber has already been mentioned. But it is manifest, from the pleasure he takes in repeating the account of the great caution that was used to admit the sunshine as *much* as possible, and as *long* as possible, into all those which he deemed the principal rooms, that there were hardly any means for affording warmth, except by open pans of hot embers, in the greater part of the numerous apartments even of this *Great Man's Villa*;—who yet made warmth so much an object.

The *Triclinia*, (the supper rooms,) or best apartments;—are also found oddly dispersed, in a most irregular, and strange manner;—one at the *bottom* of one of the towers, *under the granary, and store-room for fruits*;—another, at the *top* of the other tower;—one close to the place where the servants and slaves exercised themselves;—another close to *that* where was the place for exercise in the garden.—Some on one side of a court, and others on the opposite.—And even *his Library* was adjoining to the angle where was the place of exercise for the slaves; and remarkable for its elliptic form, and for the *number* of windows to *let in the sunshine*, rather than for any other circumstance.

Here was surely building enough;—and magnificence more than enough;—but of convenience, and real comfort, (which *Pliny* himself acknowledges he could find only in his *little retired bed-chamber* in the summer-house, at the end of his terrace); of convenience and real comfort, as little as might be, after so much cost:—whilst the transparent lights, either of *transparent stone* from Spain,—or of oyster shells,—or of oiled paper,—every one of which were in those days deemed advantages of great magnificence, and as such, are highly spoken of by *Pliny*,—were but a poor substitute for glass; and whilst even this advantage was confined to a very few windows.

The plan, as we have it from *Pliny* himself, if we adhere closely to the very words of his description, leaving out every digressing passage, appears to have been as follows.

There was first of all,

1. *Atrium*.

2. *Deinde Porticus in (O) litææ similitudinem circumactæ.*

3. *Quibus parvula area includitur.—Egregium hæc adversum tempestates receptaculum: nam specularibus ac multo magis imminentiibus tectis muniuntur.*

4. *Est contra medias, Cavædium.*

5. *Mox Triclinium, quod in litus excurrit: undique valvas, aut fenestras non minores valvis habet: atque ita a lateribus et a fronte quasi tria maria prospectat.*

A tergo Cavædium.

6. *Porticum.*

7. *Aream.*

8. *Porticum rursus, mox atrium, silvas et longinquos respicit montes.*

1. An open court;—(or such as *Cicero* speaks of in his letter as an *Atrium Majus*).—

2. Then a *Crypto-porticus*, in the form of an oval, which plainly had a pent covering;

3. And which surrounded a smaller court, (or *Atrium*), whilst both together formed an excellent retreat from bad weather; because protected both by transparent windows, and projecting coverings.*

4. Opposite to the middle of this was (at the further end) a sort of large Saloon,† or principal *Triclinium*.

5. And, just by it, a *Triclinium*, or best dining room, (or rather a supper room); projecting, and looking towards the sea, having doors, or windows not less than doors, on all sides; and so having three views of the sea, as seen from the front, and from both the sides.

Behind the *Cavædium* was,

6. Another portico, with

7. A small court.

8. And a portico again (that was, as it should seem, on the furthest side the court), ‡ and then a porch, or *Atrium* of entrance, that looked towards woods, and distant mountains.

* These words plainly describe *windows* on the sides of some apartments adjoining to the portico, (either of glass, or of transparent stone, or of thin oyster shells, or of oiled paper, all of which were in use in *Pliny's* time), and also the *projecting pent* supported by pillars over-head.—*Pliny* indeed *here* uses the single word *Porticus*; but so also does *Cicero*, more than once, in a similar manner.—And it is very evident, that the Romans often so called those very kind of *piazas of houses*, which in the days of the *Antonines*, were more exactly distinguished from the magnificent structures connected with public buildings and temples, by the name of *Crypto-porticus*;—whilst the word *Crypto-porticus* in the time of *Pliny* was not so often used, except where there was a long inclosed gallery (or sort of *crypt*) running all the way by the side of the narrow walk that was open with pillars.

† There is an apparent mistake in *Lord Orrey's* translation, who conceived the *Cavædium* to have been a court; which flings the whole description into confusion. The same error occurs also, with the same consequences, in *Mr. Melmoth's* elegant version.

‡ It deserves to be remarked, that in this description of *Pliny's*, as well as in some of *Cicero's* descriptions, the words *Atrium*, *Porticus*, and *Crypto-porticus*, are evidently

Hujus a lava retractus paulo.

9. *Cubiculum amplum.*
 10. *Deinde aliud minus.*
 11. *Adnectitur angulo Cubiculum in apside curvatum, quod ambitum solis fenestris omnibus sequitur.*

12. *Adhæret dormitorium membrum, transitu interjacente.*

13. *Reliqua pars lateris hujus, servorum libertorumque usibus detinetur, plerisque tam mundis ut accipere hospites possint.*

Ex alio latere,

14. *Cubiculum politissimum.*
 15. *Deinde Cubiculum grande, vel modica Cœnatio.*

16, 17. *Post hanc cubiculum, cum procoetone, altitudine æstivum, munimentis hybernum.*

18. *Huic cubiculo aliud.*

19. *Et procoeton communi pariete junguntur.*

20. *Inde balinei cella frigidaria spatiosa et effusa, cujus in contrariis parietibus duo baptisteria velut ejecta simulantur, abunde capacia si innare in proximo cogites, adjacet unctuarium hypocaustum adjacet propugnæ balinei.*

On the left of the *Cavædium*, a little more remote from the sea, than the *Triclinium*, or dining room, (*were apparently the winter apartments, consisting of,*)

9. A large bed-chamber.
 10. Then another less.
 11. And to the angle formed by the two rooms, (or by the *Triclinium*, and bed-chamber), was* added an elliptical *Cubiculum*, used as a sort of library), admitting the sun by its windows through the whole of its course.

12. A sleeping room adjoins, as an appendage to it, with an intervening passage.

13. The remaining part of this wing was appropriated to be apartments of slaves, and freedmen:—but they were mostly so neat that they might be used for guests.

On the other side of the *Cavædium*, (or in the other wing) *were, apparently, the summer apartments, consisting of,*

14. An highly finished chamber.
 15. And then, of what would serve either for a large bed-chamber, or small supper room.

16, 17. After this, a *summer* bed-chamber, from its height; but a *winter* one from the protection of its walls; with a closet.

18. To this, another bed-chamber,

19. And an adjoining closet for a servant, connected by one common wall.

20, 20, 20, 20, 20. After this, the baths,—with a spacious cooling room; projecting from whose opposite walls were two cold baths, large enough to swim in, if you pleased; and adjoining an anointing room, an hypocaust; adjoining also was the furnace of the bath.

sometimes used as if they were synonymous; which is too apt to create doubt and confusion of ideas.—The accurate distinction was seldom observed, because they all indeed connectively related to a great court, and its entrance.

* For the sake of preserving a connexion with the preceding descriptions, I have ventured in this translation to express in the *preterimperfect tense*, what *Pliny* speaks of in the *present tense*.

21. *Mox duæ Cellæ elegantes.*
21. Next were two elegant little bath closets.
22. *Cohæret calida piscina mirifice, ex qua natantes mare aspiciunt.*
22. And then was closely connected, an admirable warm bath, or reservoir, from whence those who were swimming might behold the sea.
23. *Nec procul Sphæristerium.*
23. And near this a circular building for exercise at ball.*
24. *Hinc Turris erigitur, sub qua Diætæ duæ,—totidem in ipsa:—præterea Cenatio, quæ latissimam mare; longissimum litus, amenissimas villas prospicit.*
24. 24. Connected with this latter (and as it should seem, by a colonnade† in the front of the house) was a Tower, with two open summer rooms at bottom;—and two more in it;—besides a supper-room, (at top), which looked upon a wide sea, a long shore, and most beautiful villas.
25. *Est et alia Turris:—in hac Cubiculum, in quo sol nascitur conditurque; lata post apotheca et horreum. Sub hoc Triclinium, quod turbati maris non nisi fragorem et sonum patitur.—Hortum et gestationem videt.*
25. And there was also connected another Tower; containing a bed-chamber, with the advantage both of the rising and setting sun;—beneath this a store room for fruit, and a granary;‡—and underneath a Triclinium (or entertaining room), which even in a storm, admitted only the sound of the dashing of the waves;—it looked upon the garden (gggg); and place of exercise (EEEE).
Evidently beyond this was,
26. *Cenatio remota a mari.*
26. A supper room removed from the sea.
- 27, 28. *Cingitur diætis duabus a tergo, quarum fenestris subjacet vestibulum villæ.*
27, 28. Which was inclosed behind by two summer rooms, whose windows commanded a view of the entrance of the villa.
- 29, 30. *Hinc Crypto-porticus prope publici operis instar extenditur.—Utrinque fenestræ, a mari plures, ab horto singule.*
29, 30. From hence extended a Crypto-porticus, (manifestly with an inclosed gallery behind it), nearly as distinguished as a public work,—with windows on both sides,—many next the sea,—few towards the garden.

* It plainly appears that this *Sphæristerium*, or circular place for exercise at ball, was not an open area; but must have been a room, and indeed not a very large one; because we find, in Pliny's description of his *Tuscan Villa*, that it was above stairs.—His words (Lib. v. Ep. 6.) are, "Apodyterio superpositum est sphæristerium, quod plura genera exercitationis, pluresque circulos capit." *Over the undressing room is the circular place for exercise at ball, which contains the accommodations for several sorts of exercise, and many circles.*

† It appears most evidently, from Pliny's words, that both towers were connected, some how or other, with the *Sphæristerium*.

‡ It is almost impossible to read the description of *this tower*, with a granary and store room, in the midst of it, and *between such kind of apartments*, without bringing to mind the

31. *Ante Crypto-porticum xystris violis odoratus.*

In capite xystris deinceps crypto-porticus,— horti diata, est, amores mei;—in hac,

32. *Heliocaminus quidem, alia xystrum, alia mare, utraque solem, cubiculum autem valvis, crypto-porticum fenestra prospicit.*

33. *Qua mare contra parietem medium diata perquam eleganter recedit: quæ specularibus et velis obductis reductisque modo adjicitur cubiculo, modo aufertur. Lectum et duas cathedras capit:—a pedibus mare, a tergo villæ, a capite silvæ: tot facies locorum totidem fenestris, et distinguit et miscet.*

34. *Junctum est cubiculum noctis et somni. Non illud voces servulorum, non maris murmur, non tempestatum motus, non fulgurum lumen, ac*

31. And before the Crypto-porticus, a terrace perfumed with violets.

At the end of the terrace, and of the Crypto-porticus, (says Pliny) is the summer-house of the garden, my delight: containing,

32. A truly sunny apartment, which looks one way towards the terrace, another way towards the sea, and on both sides has the advantage of the sun;—by its folding door, it looks into the adjoining chamber; and by a window into the Crypto-porticus.

33. On the part where it looks towards the sea, in the midst of the wall (fronting the sea), is an elegant summer recess, receding from the room;—which by transparencies (in doors) with curtains, either drawn or undrawn, is sometimes added to the apartment, and sometimes separated from it. It holds a bed (or couch), and two chairs: the feet of the bed are towards the sea; its back towards the villas; its head towards the woods: and these different views are both diversified, and blended, by means of as many different windows.

34. Adjoining is the bed-chamber for the night, and sleep. This is neither annoyed by the voices of young servants, the murmur of the sea, the rumbling of tempests, or the flashes of lightning; and indeed even day-

history of still more antient, and of ruder times;—when we read, in the Holy Scriptures, (2 Samuel, chap. iv.) with regard to the assassination of *Ishbosheth*, the son of Saul, in what was both an earlier, and a ruder kind of structure: that,

Ver. 5. “The sons of Rimmon the Beerothite, *Rechab* and *Baanah*, went and came about the heat of the day to the house of *Ishbosheth*, who lay on a bed at noon.

Ver. 6. “And they came thither INTO THE MIDST OF THE HOUSE, AS THOUGH THEY WOULD HAVE FETCHED WHEAT; and they smote him under the fifth rib; and *Rechab* and *Baanah* his brother escaped.

Ver. 7. “For when they came into the house, he lay on his bed in his bed-chamber, and they smote him and shew him, and beheaded him, and took his head, and gat them away through the plain all night.”

If *Pliny*, in his elegant villa, sleeping at the noon tide hour, even in the days of *Trajan*, might yet be sleeping in an apartment so near a granary;—how much more possibly, in a Syrian tower in Palestine, might *Ishbosheth* be sleeping near such a repository of corn.—So much more needful to be well protected in *Ishbosheth's* days, than in *Pliny's*.²

ne diem quidem sentit, nisi fenestris apertis. Tam alti abditique secreti illa ratio, quod interjacens andron parietem cubiculi hortique distinguit, atque ita omnem sonum media inanitate consumit.

35. Applicatum est cubiculo hypocaustum perexiguum, quod angusta fenestra suppositum calorem, ut ratio exigit, aut effundit, aut retinet.

36, 37. Procoeton inde et cubiculum porrigitur in solem quem orientem statim exceptum ultra meridiem, obliquum quidem, sed tamen servat.

light is not perceived, except the windows are open.—The cause of such profound and retired privacy is, that a void space (between the walls)* separates the wall of the chamber, and of the garden; and so, by the intervening cavity, prevents the passage of sound.

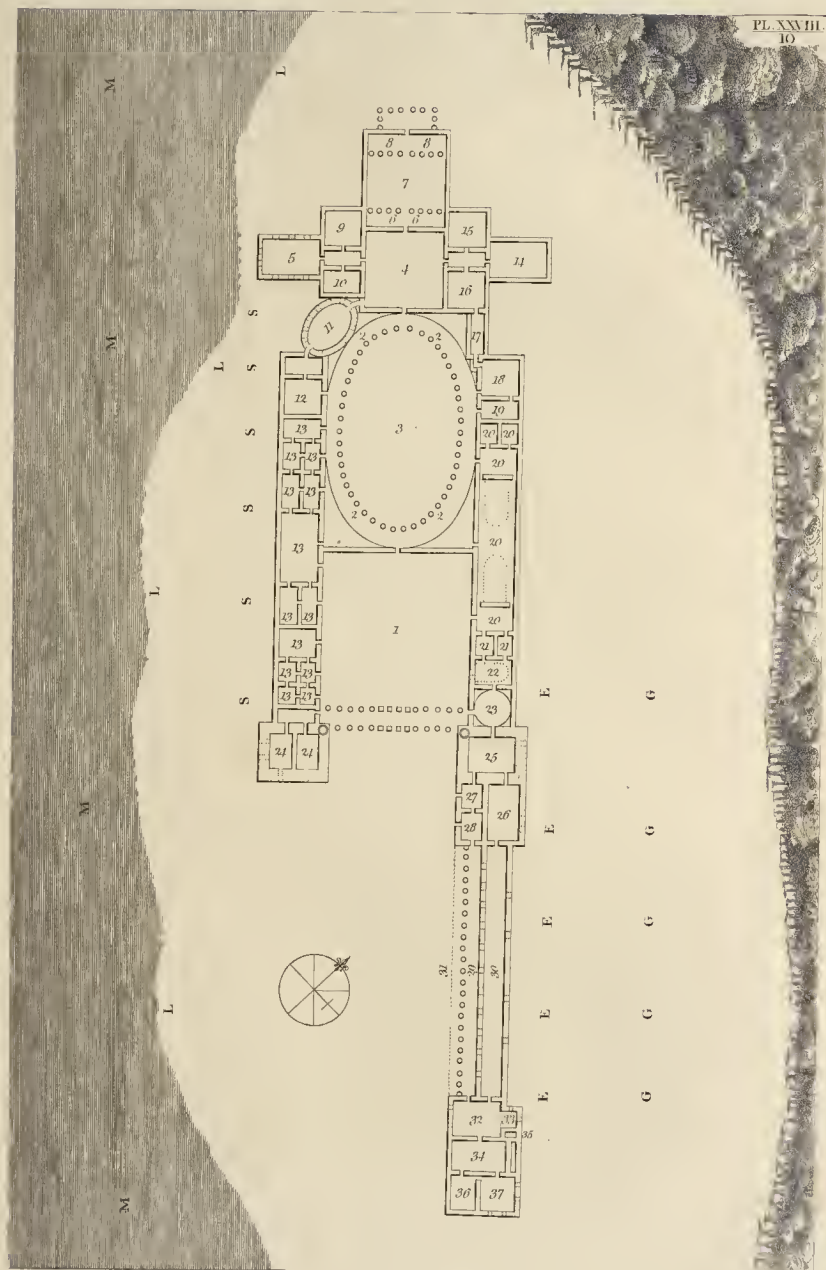
35. Annexed to the bed-chamber is a very small hypocaust, which by a narrow aperture either lets out or retains the heat underneath, just as is required.

36, 37. There is then a lobby (for a servant) and a chamber so situated, that it receives the rays of the rising sun, and retains them (though obliquely indeed) till past noon day.

The annexed plan, Pl. $\frac{\text{xxviii}}{10}$, in which all the figures are made to correspond with the numbers prefixed to the several parts of the preceding description, will explain my idea of the whole.—As no certain foundations however have been traced, I will not be so presumptuous now, at the end of more than seventeen hundred years, as to affirm that this idea is precisely right.—But I am persuaded, that it is very near the truth: and I cannot forbear adding an earnest wish, that those who are curious, would peruse every word of *Pliny's letter*, (even those long digressions which have here been omitted,) in order to apprehend still more fully, how exactly this plan agrees with every part of his account; and how it reconciles those inconsistencies that at first sight appear to a reader, and some of which first induced me to depart, (as I have done so entirely), from Mr. Castell's plans. The striking correspondency also, that there is, between the whole of *Pliny's* description, and the appearance of the remains discovered at *Woodchester*, will by such perusal become still more obvious.

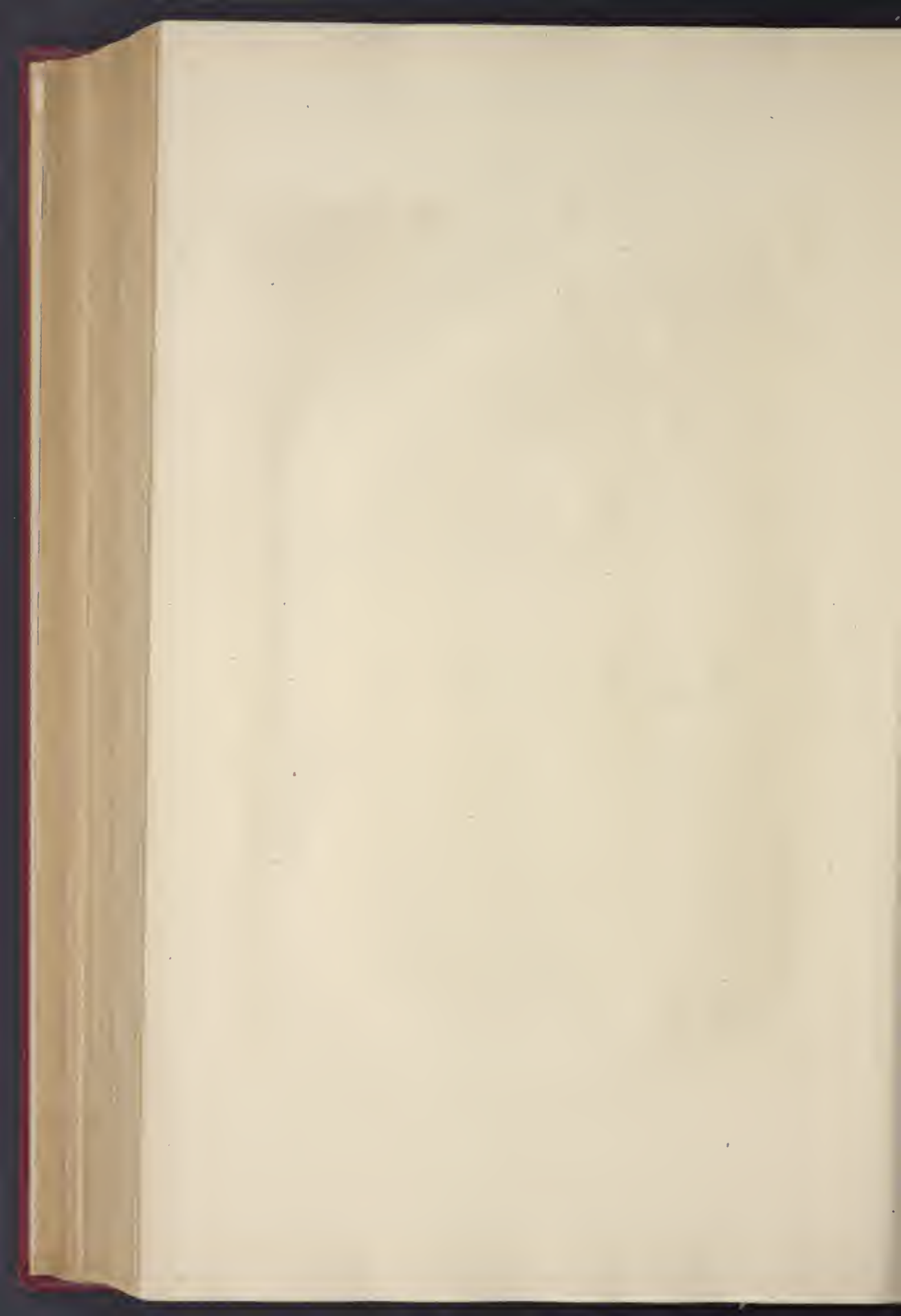
It scarce needs be added, that according to my ideas at (c c c c) was the garden; with (e e e e) the walk or place of exercise;—at (s s s s) the servants, and slaves place of exercise;—at (l l l l) the shore; and at (m m m m) the sea;—and that whoever examines the map, with regard to the situation of *Laurentum*, (the present *St. Lorenzo*) will find the trending of the shore,—the kind of views

* This is exactly similar to what was discovered with regard to the apartment, No. 10, at *Woodchester*.



Pliny's Laurentine Villa.

Published by the A.S. Society, June 1871.



from each apartment, as described by Pliny,—and the points of the compass,—to agree most minutely with this plan.

Such seems to have been this great villa of the favourite of *Trajan*;—but if we wish to entertain apprehensions, at all adequate to the thankfulness which ought to fill our hearts, for the gradual improvement of advancing ages, even in the midst of all their counterbalancing derangements, we cannot but be aware, that this mansion wanted many of those which we are now habituated to deem essential comforts;—to say nothing of the benefit of those warm fire hearths, of which *Pliny*, as appears from so many passages in his letters, would have been so glad.

His *Tuscan Villa* appears unquestionably to have had *two stories*;—but yet not to have been so elegant as this, though larger, and preferable to those he had at *Tusculum*, *Tibur*, and *Prænæste*.*

His description of *his Tuscum*† is indeed so vague, that it will not admit of any attempt to form, at present, any decided plan of the disposition of the apartments; but still it is such, and contains so many particulars, that we may venture to be assured *Mr. Castell's* representation of its magnificence is by no means a right one.‡

Thus far, as it appears to me, an impartial attention to the most minute circumstances of *Pliny's* description may fairly conduct us:—we may venture to rest satisfied, that it consisted of a long extended front, towards the south, two stories high; with a portico before it;—and with two considerable rooms as wings;—one of which was a *Triclinium*, or state entertaining room; the other *Amplissimum Cubiculum*, a very large chamber.

That, behind this range in front, was a square court, or *Atrium*; (his words are *Atrium ex more veterum*);—and that this court had apartments two stories high around it: whilst beyond it, and just opposite to the middle of the portico, (*contra mediam fere porticum*,) extended still further a second little court, with buildings round it, (*dicta paulum recedit, cingit areolam*,) in the midst whereof was a basin of water, and four plane trees, at the four corners.—And that

* See his own words, lib. v. Ep. 6.

† Ibid.

‡ *Mr. Castell* seems to have been misled, by an attempt to bring the whole to accord with *Lord Burlington's* ideas of more modern Italian architecture, and by mistaking the nature of the *Atrium*, and taking it for a room.

there was another lesser portico terminating this little projecting Court.

We may conclude also, that there was *here*, at Pliny's *Tuscum*, at a small distance in the garden, a retired summer building, containing summer apartments, just as at *Laurentum*.—And the garden itself seems to have been even more extensive, and more formal, with its regular horse course, regular clipped trees, and regular places for exercise, than that at *Laurentum*;—whilst undoubtedly the idea of water conducted in pipes to water all the greens round the horse course; and numerous marble seats for resting, conveys an idea of expensive magnificence.*

But surely the little square court, the so obviously favourite, and inner court of the house, (as appears from *Pliny's* own words when he talks of it with such rapture), that had the fountain in the midst, and a plane tree at every corner, and a painting of birds sitting upon trees, (*ramos, insidentesque ramis aves imitata pictura, cui subest fonticulus*) conveys no very high idea of real beauty, and elegance; any more than the part of the garden he boasts of, with his own name, and his gardener's name, and many other names, as well as figures of beasts, cut in box; and with trees cut in the form of pyramids, and various other figures:—or than that which he deemed so great an ornament of the separate summer building;—a marble *Stibadium, or bed*, covered with an arbour, formed by a vine, close to which was a large marble bason, into which the water flowed, as if pressed out from the sides of the marble, by those lying on this couch, (*velut expressa cubantium pondere*);—and which was so contrived as not to overflow;—whilst the smaller dishes, at any entertainment given here, were made to float upon the water, and represented birds, and little ships;—and the larger were placed upon the margin.

This short combination of facts, with regard to the *Villas of Cicero*, and *Pliny*, at the same time that it throws light upon the remains of *Roman Villas* discovered in *Britain*, may also justly lead us to observe caution in forming any very high and exalted ideas of the real elegance, or magnificence, in point of architecture, introduced by

* Per totum hippodromum inductis fistulis strepunt rivi, et qua manus duxit sequuntur. His nunc illa viridia, nunc hæc, interdum simul omnia, juvantur.—I have sometimes suspected, that the first idea of the garden, and water-works at *Versailles*, was taken from this description.

the Romans into this country.—It cannot be supposed to have exceeded that which was displayed in the mansions of these two great men; where yet tessellated floors,—plastered walls,*—cold, damp apartments, darkened to keep them a little warmer, and with very few advantages of transparent windows;—narrow porticos, supported by wooden pillars;—and a great extent of nests of little rooms, most frequently all upon the ground floor;—and here and there an hypocaust;—were the admired objects of luxury.

Perhaps, as a still further means of accounting for the several *detached hypocausts* found in different parts of Britain, we ought also to bring to mind the incidental circumstance mentioned by *Pliny* at the end of his letter concerning his *Laurentum*; that the Romans were accustomed to have *common baths*, to which was access at a certain price, in almost all their towns. For whilst, on the one hand, it is very probable that some of the spots where remains of *hypocausts* are now met with, were actually such kind of public buildings, this circumstance may, on the other hand, illustrate still farther, *the very manner* in which *Agricola*, as has been related from the words of *Tacitus*, endeavoured to introduce beneficial advantages of civilization amongst the inhabitants of this island.

Pliny, in the latter end of his epistle, enumerating the many recommendations of the situation of his *Laurentum*; says, of the adjoining village of *Ostia*,

* Even the very fresco painting on these walls, would not be deemed a really desirable or elegant ornament in these days, in which mankind have been so long accustomed to a better and more pleasant kind of decoration.—Whoever examines the very accurate specimens in Mr. Lyson's Book, Pl. XXXI. will be convinced of this.—The rudeness of the design, in the remains of the figures, transcends what could well be believed;—and the parts of the walls adorned with *mere stripes of colours*, must have had a still worse effect.

Perhaps it will not be much beside the purpose to add; that as to their common furniture, —the red earthen ware, of which specimens were found at *Woodchester*, (represented by Mr. Lyson's, Pl. XXXII.) do not afford us an high idea of elegance in this point, any more than the numerous curious fragments dug up at *Lombard-street*, in London, and at *Lincoln*; (represented in the *Archæologia* Vol. VIII. p. 120, 378.) or than those that have been brought from the rock on which the Roman ship laden therewith was formerly wrecked, near the coast of *Sandwich*, in Kent, (*Archæologia*, Vol. V. p. 282. Vol. VI. p. 121.) Their real inferiority, in point of appearance, and cleanliness, to such earthen ware, and China ware, either foreign, or European, as has now long been in common use, must be obvious to every unprejudiced eye.

“ In hoc balinea meritoria tria. Magna commoditas, si forte
 “ balineum domi vel subitus adventus, vel brevior mora calefacere
 “ dissuadeat.

*In this (village) are three hired baths; a great convenience, if either
 one's sudden arrival, or short stay, hinders the heating of the bath at
 home.**

The Roman camps;—the Roman walled stations;—and these Roman villas, even in their most fragile parts;—do all of them afford us sufficient traces, and indications of what they once were:—but it is not a little remarkable, at the same time, that of *Temples*, or *Amphitheatres*, or *Basilicæ*, or of *arched walls*, or of *arched gates*;—so very few should be met with in *Britain*, when unquestionably they stood as good a chance of being preserved here, as in *Italy*,

* A complete Roman bath seems to have contained usually, a cold bath, a warm bath, and an hot bath; besides which there were three little cells, with seats for sweating, of different degrees of heat, used only occasionally; and to these was added a small apartment for anointing.—Their custom seems to have been most usually, first to anoint themselves;—then to use violent exercise in the *Spharisterium*;—and then to bathe.—This appears from the accounts of Vitruvius; and also partly from *the account of Pliny's own bathing*, given us in that admirable letter, where after he has so interestingly described his rational mode of passing his morning hours at his *Tuscum*, lib. ix. Ep. 36. He says, *Iterum ambulo,—ungor, exerceor, labor. I then walk again,—I am anointed,—I use my exercise,—I bathe.*

And it ought not to pass unnoticed, that from this very letter it seems to appear, that the windows of his apartment had no other fence from the external air than shutters;—as he usually kept them fast closed long after he was up, both for the sake of meditating more intently, and of being retired.

“ Evigilo Plerumque circa horam primam: clausæ fenestræ manent. Mirè enim silentio et tenebris animus alitur. Ab iis quæ avocant abductus, et liber, et mihi relictus, non oculos animo, sed animi oculis sequor, qui eadem quæ mens, vident, quoties non vident alia Notarium voco, et die admissio, quæ formaveram dicto;—abit, rursusque revocatur, rursusque remittitur.”

I awake generally about the first hour, (six o'clock):—the windows remain shut;—for the mind is astonishingly aided by silence and darkness. Abstracted from those things which divert attention, at liberty, and left to myself, I follow not my eyes with my mind, but my mind with my eyes, which (internally) discern the same things as the mind does, so long as they see no others (externally). I call the amanuensis, and letting in daylight, dictate what I had composed;—he goes his way,—again is recalled,—and again sent off.

The sweating seats, or *assa*, were mentioned in *Cicero's* Letter, referred to in p. 195; and a custom of sleeping, or taking what is called *the siesto*, after bathing, is intimated in his other letter referred to, p. 199.

Greece, Dalmatia, Asia Minor, Egypt, or any other Roman provinces where they ever had been at all erected.

The remains of what is called the Temple of *Janus*, at Leicester;—the remains of a temple found at Bath;*—those of the Pharos, and Old Church, at Dover Castle;+—the remains of Roman arches at Chester;‡—and those that did exist a very few years ago at Canterbury;§—with those which (so reproachfully for the persons concerned in their destruction), did once exist in what was called *Arthur's Oven*,|| are almost all that are known.

We must therefore be led to conclude, that in truth the Romans considered Britain as a remote inferior province, and on that account reared very few, if any edifices of any distinguished magnitude or splendour in this Island.¶

The wall of the supposed Temple of *Janus*, at Leicester, or the *Old Jewry Wall*, as it is sometimes called, I examined myself in the year 1770. But even this Remain, does by no means convey any idea of such kind of Roman magnificence, as we are taught to apprehend existed in numerous instances on the continent.

Two great arches of good proportions, turned entirely with tiles, remained on the outside, where had been the entrance; and four, still larger, turned in like manner with tiles, appeared on the inside;*** with some smaller arches, and niches, placed at different heights, and constructed of tiles like the others;—but it is most

* There is a very curious account of these Remains published by *Governor Pownall*;—and another by *Mr. Warner*;—and also an account of them in the *Archæologia*, Vol. X. p. 325.

+ A particular account of this will be found in the following pages.

‡ A view of the Old East Gate at Chester, with its two arches, may be seen in *Pennant's Tour in North Wales*, p. 110.

§ And some mention of the old Roman arches, at *Riding-gate*; *Worth-gate*; and *Queenin-gate*; is still preserved in *Mr. Gostling's Walk round Canterbury*, p. 6, 7, 11. See also *Sommer*, p. 10, 11, 16.

|| Representations of *Arthur's Oven*, may be seen in *Pennant's Tour in Scotland*, p. 242; and in *General Roy's Military Antiquities*, Pl. XXXVI.

¶ Some have thought the *Werry Wall*, at *Lancaster*; and the *Old Works*, at *Worcester*, to have been Roman works, but they do not carry decided marks of having been such with them.

*** Of these there is a well known representation amongst *Buck's Views*; and another in *Mr. Gough's Camden*, Vol. II. p. 208. Pl. IV. fig. 1.

remarkable, that in the forming and turning of these arches, the intervening mortar is found to be nearly as thick, in many places, as the tiles themselves; a plain proof that there must also have been originally intervening pebbles, or other coarse materials, to keep them so asunder notwithstanding the pressure: which surely discovers a style and mode of building, of a most negligent and rude kind; and such as is not to be compared, with that of the well known old gate at Canterbury, where no such imperfection was seen.*—And it is still more remarkable, and a proof of still more negligent building, that the outside, and inside arches, (even where the entrances seem to have been,) do not correspond exactly in point of situation with each other, but stand quite awry, as if they had been built by some such blundering architect as Cicero's *Diphilus*.

What remained of this wall was about 70 feet in length, and between 20 and 30 feet in height, and about 5 feet in thickness;—and, from the bottom to the top, it was built of alternate courses of rag-stone, and of brick, in the Roman manner.—Each course of bricks consisting generally of three rows, though the upper one of all has only two;—and the several bricks being of unequal dimensions; yet in general a little more, or a little less than 18 inches long, and about $1\frac{1}{2}$ inch thick, or sometimes a little more; and about 10 or 12, or sometimes 15 inches broad.—Whilst here again the mortar placed between each row, was found to be nearly as thick as the bricks themselves.—The courses of stone, had not the same regularity with the courses of brick: for they consisted sometimes of three, and sometimes of four, or even of five rows of rough forest-stone, or *rag-stone*; and in some places the stones were manifestly flung carelessly and promiscuously into the mortar, in all sorts of directions. There have been counted by some persons, nine of these courses of stone, and eight of brick; *i. e.* in all seventeen; but I could not make out so many when I viewed the Remain;—the interruption of the small arches and niches, or the pulling down

* It grieves one exceedingly to be forced to add, that this is now pulled down; as to the account of it, see Gostling's Walk, p. 365. I examined it myself attentively in 1775.

some part of the wall, may possibly have been the cause that prevented me.

In all these works of the Romans, either military or others, that we have been considering, except in the supposed temple of *Janus*, at *Leicester*, and in those remains that were at *Canterbury*, *Dover*, and *Chester*, it is astonishing how few arches appear.—And this circumstance may induce us to suspect, that *the Arch* was really considered, in those days, even as a work of *novel*, and extraordinary magnificence, and therefore seldom introduced.

There is reason to believe that many of the antient Roman bridges were without any arches.

That celebrated one of *Julius Cæsar*, over the *Rhine*, constructed of timber, certainly had none.*—That still greater fabric of stone, built by *Trajan*, to form a passage over the *Danube*, described by *Dion*; † and whose still remaining piers, are particularly described by Count *Marsigli*, ‡ as being without springs for arches, also appears to have had none. The word *ἀψίς*, as used by *Dion*, seeming, rather to imply merely a connection of one pier with the next, which might be by frames of timber.

And as there are good reasons for concluding, that some of the old piers that remained, still forming a part of the bridge at *Newcastle*, which was at last destroyed in 1771; § were in reality, the very piers of an old *Roman bridge* at that place, we may venture to affirm, that *that* also had none:—for they seemed clearly, to the workmen employed to pull them down, to have been originally formed *without any springs for arches* at all; whilst in those very piers were found several *Roman coins*; and one particularly of *Faustina* the elder.

But however this matter may have been with regard to any bridges built in *Britain*; we may venture to affirm, since the arches at *Chester*,—the gate at *Lincoln*,—the arches at *Dover* of the *Pharos*,

* *Cæsar's Commentaries*, lib. iv. sec. 15.

† *Dion Cassius* *Reinari*, p. 1129. See also *Monfaucon Antiq.* Vol. IV. Part. i. p. 185. Tab. 115. And *Brown's Travels*, p. 6.

‡ *Topogr. Danub.* Tom. II. p. 22. Tab. 10.

§ *Pennant's Tour in Scotland*, Part II. p. 315.

and Old Church,—and those of the curious old gates at Canterbury, remained entire so long;—that if there really had been many other considerable arches constructed by the Romans in Britain, *some* of those others must have remained also; at least long enough to have been preserved on record.—There are, however, no such traces to be met with:—for as to Micklegate Bar at York, it has justly been suspected not to have been a Roman work;* and, indeed, even that at *Lincoln* seems to have been only *British* imitation.

The double gate at Chester, stood facing the great Watling-street road, and near a place where other military ways united. It was composed of two equal adjoining great arches, separated by a pillar, and similar to the *Porta Esquilina*, and *Porte portese* at Rome;—similar also to one in Spain.—It had, in modern ages, the addition of a Norman casing, on the outside; but that being afterwards taken down, the true Roman architecture appeared full to view, for some time, till at last the whole was destroyed only a few years ago.†

The supposed Roman gate at Lincoln, of which Mr. *Essex*, with so much accuracy investigated the proportions,‡ is indeed a magnificent work:§—but if, with all its gross irregularities, and imperfections in point of architecture,—*without any regular key stone*,—and with such *irregular and disproportioned stones in the sides*,—it has nevertheless stood firm so long; surely arches constructed in a more perfect manner, as they might have been by the Romans, (like their arches on the continent) would have stood a chance of remaining at least as long, if not longer.

The arches of the Pharos at Dover, were in a kind of building, which though it stood firm for so many ages, and has been only wilfully destroyed by force at last, yet was apparently not of such peculiar strength, but that one would think it must have perished much sooner, by the lapse of ages, if the truth indeed were, that any

* See observations by Sir Henry Englefield, in the *Archæologia*, Vol. VI. p. 105.—And also the remarks of that skilful architect Mr. *Essex*, Vol. IV. p. 81.

† There is a very curious representation of the Roman masonry of this gate, in Pennant's *Tour in Wales*, p. 110. Pl. XIII.

‡ *Archæologia*, Vol. IV. p. 82.

§ There is a tolerable representation of it in the *Gentleman's Magazine* for 1771, Vol. XLI. p. 200.

other Roman arches have so perished in this island, and especially such as were greater and more magnificent.

The old Roman arches at Canterbury, again, so lately remaining, and which were even still more slight in their construction, surely stood little chance of being visible so long, if greater works, could not be preserved.

The first of these, the curious old arch, called Worth-gate, (which has within a very few years been most unnecessarily pulled down, after much pains had been taken by discerning persons to preserve it,) was $12\frac{1}{2}$ feet wide, and about $13\frac{1}{2}$ feet in height, on the outside of the wall; but yet the thickness of the arch was only 2 feet 4 inches; and the whole was merely turned with thin Roman bricks or tiles, such as have been already so often described in these pages.

The Riding-gate at Canterbury, was nearly of the same construction, only it had two contiguous arches, which would have remained to this day, had not part been cut away to give the necessary height to the present gate of later construction.

So also part of another arch of the same sort, was still to be discovered, when Mr. Gostling made his survey, on the outside of the wall, at Quenning gate.*

All these were but slight structures; and surely *Canterbury* was a place, of all others, in consequence of its being a city of pilgrimage, trade, and continual resort, where such slight remains of Roman grandeur were more likely to have *stood in the way*, and therefore to have been destroyed, than any *arches* that can be supposed to have existed elsewhere.

We read indeed of a Temple of *Claudius*, at *Camalodunum*, into which the garrison retired to defend themselves, when that Colony which was the first and most important one the Romans had, was attacked by *Boadicea* and the revolting Britons; but we find that this Temple was soon taken by storm, and destroyed. And from the expression of Tacitus, *that the soldiers (two hundred only in number,) were crowded together in it*; we may fairly conclude that it was not an edifice of any extraordinary dimensions, or really great magnificence, notwithstanding the nervous force of his words.†

* See Gostling's walk round Canterbury, p. 7, 365, 6, 11.

† The words of Tacitus are:—*Templum, Divo Claudio constitutum, quasi arx æterne dominationis adspiciebatur, &c. &c. &c.*—*Templum, in quo se miles conglobaverat, biduo*

Camalodunum, with its supposed Magnificent Temple (which seems to have been situated nearly where now stands *Malden* in Essex,) being thus utterly destroyed by *Boadicea*, and the *Iceni*;—*London*, *York*, *Winchester*, *Bath*, *Lincoln*, *Chester*, and *Carleon*, were afterwards the most considerable colonial cities of the Romans.—Here therefore we might have expected to find Roman arches in great numbers.

At *Winchester* (*Venta Belgarum*) we have every reason to believe with *Camden*, from the fairest consideration of the words of the *Notitia Imperii*, there was even an *Imperial manufacture* of cloth for the use of the Roman army;* but at *Winchester* we look for Roman arches in vain.

Agriculture was so greatly improved under Roman auspices, that the Emperor *Julian* loaded no less than eight hundred ships, in one voyage, with corn from *Britain*;† and we are told this island was indeed *then* even more plentiful and abundant, than it was during a thousand years afterwards; but where are the remains of Roman arches at any ports?‡

obsessum, expugnatumque.—*Taciti Annalium*, lib. xiv. sec. 31, 32. Those who do not habituate themselves to ideas of mensuration, and calculation, cannot readily conceive in how small a compass a vast number of forces may be collected, allowing 4 square feet for every man, which is very nearly as much as regular troops require when drawn up in pressing circumstances, such as those mentioned by *Tacitus*.—Two thousand five hundred men might even act with effect, for defence, in a space of 200 feet, by 50, or of 100 feet square.—What then can we think of this supposed magnificent temple, at *Camalodunum*, when even two hundred men were crowded together in it? For two hundred men would indeed have had space more than sufficient to defend themselves effectually, in an area of 50 feet by 20.—Such probably, and not more, was the utmost extent of the dimensions of this wonderful temple of *Claudius*.—And indeed it could not well have been near so large, if in truth the garrison when retired into it were crowded together; who, we are expressly told, by *Tacitus*, consisted of no more than two hundred men, indifferently armed; (*haud amplius quam ducentos, sine justis armis misit*, lib. xiv. sec. 32.)—The area of the small *Sacellum* at *Richborough*, 43 feet 8 inches, by 19 feet, so accurately measured by *Mr. Boys*, and described in the beginning of these inquiries, would have admitted room for the same number to have acted with advantage.—And surely it cannot be forgotten, by any one acquainted with history, in what manner *Charles the Twelfth of Sweden*, with about sixty soldiers, (if *Voltaire* is at all to be depended upon) defended himself for a considerable time, in the mere hall of a small house at *Bender*, against the whole Turkish army consisting of six thousand Turks, and two thousand Tartars. *Voltaire's History of Charles the Twelfth*, p. 76, 85.

* *Gough's Camden*, Vol. I. p. 117.

† See *Zosimi Hist.* lib. iii.; and *Ammian. Marcellin.* lib. xviii. cap. 2.

‡ See some very judicious observations in *Henry's History of Great Britain*, Vol. II. p. 93.

At *Lincoln, York, Chester, and Carleon*, were *Seminaries of Learning*, and for teaching the Roman language, and also Greek, in which the British youth made such great proficiency, that *Agricola*, even in the dawn of this introduction of learning, bestowed the highest encomiums upon them.*

In these places therefore, if in any, we might expect to behold the greatest and grandest remains of architecture, and arches in abundance.

But unless we can suppose the greatest and grandest remains to have perished, whilst, in the same places, slight and inferior works were preserved, we must fairly acknowledge, notwithstanding any early prejudices, that no such works, or even vestiges of any such, (except the solitary British Roman Gate at Lincoln,) did ever on these spots exist.

Neither the bronze head dug up at *Bath* (the antient *Aquæ Solis*;) nor the Roman baths, no nor even the remains of the *Temple* there discovered, are indications of the contrary, but just the reverse;—for if such remains have been by any means preserved, surely more important and magnificent remains, with their arches, might have had continuance?

Agricola indeed persuaded the *Britons*, to build what were called commodious houses, in lieu of their savage inconvenient *circular huts* and *bods*;†—and to build *Halls*;—*Basilicæ*;—*Temples*;—and *Forums*: but, in consistency with common sense, and the appearance of all the remains that have ever been dug up, or brought to light, we may rest assured, that even the *Halls* and *Temples*, were of no great dimensions; and that the *commodious houses*, were in general, one degree only above the circular huts, and bods; though perhaps we may allow them to have been as good as those wherein the inferior classes of people dwelt in Rome itself.‡

* Tacit. Vita Agric. cap. 2.; and see also with regard to subsequent times, Cod. Theod. Tom. III. lib. xiii. tit. 5. leg. 11. p. 40. as to the study of Greek.

† Tacit. Vita Agric. cap. 21.

‡ Perhaps it should not be passed unnoticed, that though every vestige of any Roman building is gone, yet that the appearance of the regular form of a little Roman town, is still preserved at *Ust* in Monmouthshire;—where, by a strange concurrence of circumstances, in this sequestered spot, buildings have been continued to be erected, from age to age, almost exactly where the foundations of the original edifices stood.—And in consequence of this,

According to the testimony of *Boethius*,* we had a specimen of one of their Temples, built in the time of *Vespasian*, remaining in that singular little structure called *Arthur's Oven*, not far from the wall of *Antoninus*:—for he tells us, there was formerly, according to the tradition of the country, an inscription on a stone, declaring that the building was erected by *Vespasian*, in honour of the Emperor *Claudius*, and of the Goddess *Victory*. This building, however, surely did not tend to give us any magnificent idea of such sort of temples.—It had indeed a tessellated pavement:—but it was only a small circular structure, $19\frac{1}{2}$ feet in diameter within, arched towards the top, with a round aperture, or opening (like that of the Pantheon at Rome) in the midst of the dome, 11 feet 6 inches in diameter; and having the utmost height to the periphery, or edge of this aperture, from the floor, only 22 feet.

At a little distance from the top, beneath the circular opening in the midst of the dome, was a small square window, on one side;—and round the inside, resting on the floor, were stone seats,—and against the wall, on the south side, an altar;—the door of entrance, which had a regular Roman arch, being placed under the square window.†

We see therefore that *arches*, and *domes*, were indeed only in an imperfect degree, and on a small scale, introduced by the Romans into Britain. Nor is this at all suprising; if we are indeed to conclude, that the *arch itself* was, in those days, in reality only a *recent invention*.

whoever looks down from the rock on which the castle stands, upon this now pretty, little, regular town, with its four square divisions containing its gardens, may see, (allowing only for the difference of more modern structures,) that which was perhaps one of the best advantages introduced by *Agricola*, the regular arrangement of the streets, and parts of an old Colonial Roman city.

* Lib. iii. p. 34.

† This interesting remain was pulled down, about the year 1743, merely for the sake of using the stones in the construction of a mill-dam, by *Sir Michael Bruce* of Stone-house, near Falkirk; whose conduct, on this occasion, was as unprofitable to himself, as it was mischievous to the learned, and curious; for a violent flood of the river soon carried all away.—An account of the illiberal treatment of the public in this business, is preserved with due reproof, in the *Antiquarian Repertory*, Vol. III. p. 73.

See also *Pennants' Tour in Scotland*, Part I. p. 242, and Part II. p. 228; and *General Roy's Military Antiquities*, Pl. XXXVI.; and *Gordon's Itin. Septentr.* p. 24. Tab. IV.

It may therefore now, be exceedingly well deserving our attention, to consider a little, whether it be possible to discover, *when?*—and *where?*—or at least, *in what age*, THE ARCH could possibly have been first brought into use?

From the time that mention is, in the very first instance, made of the appearance of the *splendid bow* in the Cloud being appointed, by ALMIGHTY GOD HIMSELF, as the token of a *Divine Covenant* with Noah; (which pledge all generations have continually beheld with so much heartfelt delight, and reverential awe,) we find no mention of any human imitation to resemble it, or of any arch, constructed of any sort of materials whatever, either in the *Holy Scriptures*;—or in *Homer*;—or in *Herodotus*;—nor indeed do the *Greeks* seem to have had *even a word* in their language, whereby *properly** to express the idea of *any such thing*, in architecture.

The Temple of *Solomon* certainly had *no arches*. We have so full and particular an account of the whole structure of *that* glorious Edifice, (which seems in truth to have been the first pattern of *regular and elegant architecture* that ever existed in the world) that there can remain no doubt of the fact.—And whoever peruses, with due consideration, the minute descriptions, in the *First Book of Kings*, and in the *Second Book of Chronicles*, will soon obtain entire satisfaction as to this matter.

The whole plan of the temple, (which had been indeed, even by divine inspiration, conceived in the mind of *David*) was delivered, by *Him*, to his Son *Solomon*, with a strict injunction, to adhere closely to it.—And we find therein, the beautiful proportions, of *the Cube*, and *Double Cube*, introduced on a larger scale, as they had originally (by a similar, and still more decided divine admonition,) been introduced, on a smaller scale, in the Tabernacle reared by *Moses*.

We find also a fine proportion in the parts of the great pillars.†

* The word ἄψις which was used, in some instances, by *Dion Cassius*, and other writers, after the time of *Augustus*, to convey the idea of an arch; is acknowledged by *H. Stephens*, Tom. I. p. 495, not by any means necessarily, (and indeed even with difficulty, and most imperfectly,) to convey *any such idea*. And the LXX. in their Version of the Holy Scriptures, were obliged to have recourse even to the word τόξον, (*a bow for shooting*), to describe the glorious *Rainbow*, where mention is made of its being appointed as the token of the everlasting covenant of mercy with *Noah*.

† It will plainly appear, to any one who bestows due attention upon the words of Sacred

But, although the shadowing wings of the high Cherubims, meeting over *The Ark of the Covenant* in the Holy of Holies; and the meeting of the branches of the palm trees, (with the figures of which, carved, and covered with gold, the walls were adorned,)

Writ, that, in the Tabernacle, the *Holy of Holies*, where the Ark was placed, was a cube of about 15 feet, (Exodus, chap. xxvi. ver. 22, 23, 25); and the *Holy place*, where the Golden Lamps, and the Table of Shew bread stood, was a double cube of fifteen. (Exodus, chap. xxvi. ver. 16.)

This Tabernacle was by express Divine Injunction, constructed exactly according to the pattern which was shewed to Moses, in a vision, in the Mount, (Exodus, chap. xxv. ver. 9.);—and, in like manner, the Temple of Solomon was built exactly according to the plan which was given by *King David* to his Son, with express injunctions to observe it; and which, we are positively told, was conceived in *his* mind, by Divine Inspiration, (1 Chron. chap. xxviii. ver. 19.); and here again, the *Holy of Holies* was a cube, but of still larger dimensions, being of 30 feet, and the *Holy place*, before it, was also a double cube of 30 feet, (1 Kings, chap. vi. ver. 20, 17; 2 Chron. chap. iii. ver. 8.); so that the first introduction of these very fine architectural proportions into the world, seems even to have been a matter of positive and *express revelation*;—as indeed all true and fine inventions, even in subsequent ages, ought perhaps ever to be considered as a species of inspiration from that Divine Being, Who alone is the source of all wisdom, and knowledge.

The other proportions of this sacred building, the Temple, are found to be no less truly admirable.

The whole structure, which was 90 feet long; was of the height of 45 feet, (1 Kings, chap. vi. ver. 2.); and the front, over the porch, for the sake of more beautiful appearance, on the outside, seems to have been adorned with a towering edifice of some kind or other, rising still higher, to the elevation of 180 feet, (2 Chron. chap. iii. ver. 4.)

The *Brazen Pillars*, or two great Columns standing before the gate of the Temple, were, in like manner, of fine proportions:—for they seem to have been 6 feet in diameter, and 52 feet in height; that is, about *eighteen modules*, or *nine diameters* in height; the very finest proportion which we are now acquainted with for the Ionic column; the most beautiful perhaps of all the orders. This fact will appear evident, from comparing (1 Kings, chap. vii. ver. 15.) with (2 Chron. chap. iii. ver. 15.) although there is, in the first passage, a proportion mentioned as to height, that introduces some little degree of confusion. The capitals also, with regard to which there is no confusion in the accounts, were, we may perceive, of very fine dimensions, and construction;—6 feet in diameter, exclusive of the projecting ornaments; and $7\frac{1}{2}$ feet in height, (1 Kings, chap. vii. ver. 16, 17, 18, 19, 20. 2 Chron. chap. iii. ver. 15, 16.)

The porch, or portico of the temple itself, was in length 30 feet;—in depth, or width, 15 feet;—and in open height 45 feet, (1 Kings, chap. vi. ver. 2, 3.)

The *Cherubims*, standing on each side the ark, were 15 feet high; and their wings, which were extended to meet each other, were $7\frac{1}{2}$ feet, (1 Kings, chap. vi. ver. 23, 24, 25.); and the dimensions of the *Cherubims*, and *palm trees*, on the wall, which were of carved work covered with gold, seem to have been of just the same proportions. (1 Kings, chap. vi.

might convey somewhat of the idea of a sort of Gothic Arch, to a mind accustomed to the structures of these latter ages; as indeed the meeting of the branches of rows of natural trees has often done; yet no real arch of any kind whatever, appears to have been at all introduced, in any part of the whole Building; or in any Building whatever, for a thousand years afterwards.

For even in the second Temple, built after the captivity, it seems clearly, by the words of *Esdras**, that there was *no Arch*, either in the stately cloysters, or in the *Holy House* itself, on its being first rebuilt; whatever there might be when it was further re-edified by *Herod*.

And, in truth, from all that can be made out concerning this Sacred Structure, in the account given by *Josephus* of its final destruction, we may still further infer, that even *Herod* had constructed no arch, at least in the House itself, or in the Cloysters, whatever he might have done in any of the gateways.

For we actually find the greatest part of the cloysters of the Temple are affirmed to have been constructed of beams of wood, laid across over head, upon massy pillars; though indeed their outward side wall was of stone, and twelve feet thick.

Having been first told, that the seditious, in order to prevent the Romans from taking the Temple through the castle of *Antonia*, had set the north-west cloyster on fire†; we are then informed,

v. 29, 31, 32.)—These might possibly, by the union either of the wings of the one, or of the branches of the other, have conveyed some idea of an arch: but the imitation thereof seems to have gone no further.

Sir Isaac Newton, in the curious detail which he has given us of *his idea* concerning the plan of the Temple of Solomon, united with the plan of *Ezekiel's* prophetic temple, speaks, indeed, of *arches*; but, from the manner in which he *distinguishes* his words *arched passages* (See his *Chronology*, p. 243, Bishop *Horseley's* edition), it is manifest, that he was aware *there was no authority for such an expression*, either in the original Hebrew, or Greek.—And from the manner in which he so evidently describes rows of *cedar beams* as supporting the building; and as *lying upon pillars of cedar* in the upper stories; and *supported by the pillars of marble*, on the ground beneath (p. 238.), it should seem, that what he merely inadvertently calls *arched passages*, were only *covered passages*, with flat imposts lying on them, from pillar to pillar.

* 1 *Esdras*, cap. vi. v. 4, 9, 25.

† *Josephus de Bello Jud.* lib. vi. cap. 2. sec. 9.

that after this, they filled that part of the western cloyster, *which was between the beams and the roof*,* with dry materials, and with bitumen and pitch; and that setting the whole on fire, the flame burst out on every side. And yet, at the same time, we may be well assured, this roof was *flat*, according to the general usage of building in Eastern countries; not only because the Roman soldiers were actually, at this very time, scaling the walls with ladders, and getting upon it as an important post; but because we also know, that before the war with the Romans broke out, this *roof of the cloysters*† was even the accustomed station of the Roman guard, to preserve order, during the time of great public festivals.

Again we find, that the next day the Romans burnt down the northern cloyster *entirely*.‡—And when the Temple was finally taken, many Jews perished by falling amongst the *ruins of the cloysters*, which we are told were still hot and smoaking.§ And some of the priests, who were upon the roof of the Building, saved their lives, for a time, merely by retiring to the top of the stone wall, that was eight cubits (or at least twelve feet) broad.||

But had either the *cloysters* of the Temple, or the *Holy House* itself, been supported by arches, we may surely reasonably think the description of the burning, and of the ruins, would have been far, very far, different.

And indeed, besides these circumstances attending the final destruction of the cloysters, there are some related previous to the commencement of the last Jewish war, which fairly lead us to draw the same inference.

For we find that the Seditious, in order to prevent *Florus*, the Roman governor, from getting possession of the Temple through the tower of Antonia, got *upon* the cloysters that joined the temple to that Tower, and *cut them down*,¶ *διέκοψαν*; which effectually prevented *Florus*; and caused him to despair of his attempt.

We find also, even before this, an instance, although the cloysters of the Temple were manifestly covered with a flat terrass, yet of their being easily destroyed by fire. For when the soldiers of

* Josephus de Bello Jud. lib. vi. cap. 3. sec. 1.

‡ Ibid. lib. vi. cap. 3. sec. 2.

|| Ibid. lib. vi. cap. 5. sec. 1.

+ Ibid. lib. ii. cap. 12. sec. 1.

§ Ibid. lib. vi. cap. 4. sec. 6.

¶ Ibid. lib. ii. cap. 15. sec. 6.

Sabinus, the Roman general,¹ in the time of *Archelaus*, just after the death of Herod, at the Feast of the Passover, forced themselves into the Temple, in order to quell a tumult; the Jews got upon the top of the cloysters, and throwing down darts, slew many of the Romans, whereupon the Roman soldiers set fire to the cloysters;* and suddenly those above were encompassed with the flame, and many of them perished.—Which shews how manifestly the whole was supported with beams of timber, rather than with arches of stone,

This was the very event which seems first to have given occasion to the custom of the Romans placing a guard of soldiers, at great festivals, on the roof of the cloysters, all round the Temple, to prevent disturbances. And this custom became at last, by means of one of those unaccountable trifling incidents on which great events often turn, most strangely, one of the principal causes of the breaking out of the final fatal war.

The indecent gesture, and most vulgar mocking, of a disorderly Roman soldier, stationed with the rest of his band on the roof of the Cloysters, at the Feast of unleavened bread, produced at once, in its immediate consequences, the most dire catastrophe that ever took place on the face of the earth.†

Another short piece of curious history ought perhaps also to be mentioned, before we pass from the consideration of this Sacred Edifice; because it does indeed seem to lead us to conclude, that in *Herod's gate* of the Temple, there might possibly be some niches, and arches;—which most probably were some of the very first that ever appeared in the world.

When, by mistake, *Herod* was reported to be dead, *Josephus* says,‡ certain zealous Jews, indignant at his having placed a golden eagle over the great gate of the Temple, caused themselves to be let down from the top with thick ropes, at mid day, and cut the eagle in pieces with axes: for which, after *Herod* had a little recovered, both they, and their advisers, were burnt alive;—and suffered as true martyrs to what they deemed the cause of righteousness.—The tale is a sad and dismal one.—But, herein, we have a sort of

* De Bello Jud. lib. ii. cap. 3. sec. 3.

† Ibid. lib. ii. cap. 12. sec. 1.

‡ Ibid. lib. i. cap. 33. sec. 3 and 4.

tacit intimation (from the manner in which they were forced to be let down by ropes to come at the figure) that the eagle, the object of their *abomination*, was placed in some *niche* over the gateway, which might possibly itself be an arched one, placed at the bottom of an high tower, from whose battlements in front, these zealous Jews were let down with cords, just far enough to reach the niche, and so to perform their work.

As in other parts, even of *Herod's Temple*, there seems plainly to have been *no Arch*, and as in *Solomon's Temple* there seems still more certainly to have been none; so the same observation, concerning the non-existence of the architectural *arch*, may be made also decidedly, with regard to *Solomon's house*, in the *Forest of Lebanon*; which he built so very magnificently, together with his house in Jerusalem, that it required no less than thirteen years to complete them.

In these stately Palaces, although immensely great stones were used, some fifteen feet, and others twelve feet, in length, for the constructing of the walls;* yet we are expressly told, that the covering above, was upon *rows of cedar pillars*, with *cedar beams upon the pillars*,† whilst the stones seem to have been used only for the walls, and principally in the outward walls.

The house of the Forest of Lebanon, seems evidently to have surrounded a court, one hundred and fifty feet in length, and seventy-five feet in breadth; and to have had an open portico, or gallery, on every side next the court, supported by cedar pillars; with small rooms over in three stories (or rows), carried up to the height of forty-five feet.‡ In which respect, it very nearly resembles the description that *Homer* has given us of the *Palace of Priam*.—And *Solomon's own house*, where he dwelt in *Jerusalem*, had, we find, an additional court;§ whilst there were open porticos in the fronts of both these palaces:—And whilst, from the account given of the steps ascending to his magnificent throne,|| we may be convinced they were not deficient in having the advantage even in those early days, in *Syria*, of steps, and staircases

* 1 Kings, cap. vii. ver. 10.

+ Ibid. cap. vii. ver. 2, and 3.

† Ibid. cap. vii. ver. 2, 3, and 4.

§ Ibid. cap. vii. ver. 18.

|| 2 Chron. cap. ix. ver. 18.

regularly formed.—Express mention is made of a regular *winding staircase*, ἐπιπύρη ἀνέλιξις, ascending to the chambers on the sides of the *House of the temple*: but there is not the least intimation of any *arches*; and, indeed, from the particular description of the construction of those chambers,* it appears that there could be none, either in them, or in the Sacred House itself.

Throughout all the books of *Homer*, there is no mention of an *arch*, either in the *Iliad* or *Odyssey*, from one end to the other:—no, not where we might most of all expect some description of such stately ornament;—not even in the account of the palace of *Priam*.

Pope, indeed, in his translation, more elegant than correct, tells us of *arches* and *domes*, in that palace; but we find no *such things*, in reality, mentioned in the original.

Popes words are, *Iliad*, Book vi. l. 304, &c.

And now to Priam's stately courts he came,
Rais'd on arch'd columns of stupendous frame;
O'er these a range of marble structure runs,
The rich pavilions of his fifty sons,
In fifty chambers lodged: and rooms of state
Opposed to those, where Priam's daughters sate:
Twelve domes for them and their lov'd spouses shone,
Of equal beauty, and of polish'd stone.

But to say nothing of the inconsistency of the expression, *arched columns*;—nor of the almost bombast expression concerning the *pavilions*;—in *Homer's* words+ we find simply, that it was *built with porticos of hewn stone*,

Ἔσπερ' ἀθροσθησι τετυγμένον,

Which conveys exactly the idea of a building reared upon stone pillars, supporting either beams of timber, or transom stones, like those of Egypt, or Persepolis.—And we find also, that there were in it, not either *fifty pavilions*, or *twelve domes*;—but simply, that there were *fifty cells*, or *small chambers*, for the sons; and *twelve*

* 1 Kings, chap. vi. ver. 8.

+ *Iliad*, lib. vi. ver. 243.

others for the daughters, on the opposite sides of the court: the words are,

Πεντήκοντ' ἔνεσαν Δάλαμοι ἕκστοιο λίθοιο
 Πησίοι ἀλλήλων δεδμημένοι ἐνθάδε παῖδες
 Κοιμῶντο Πριάμοιο παρὰ μηστῆς ἀλόχοισιν
 Κουράων δ' ἑτέρωθεν ἐναντίοι ἐνδοθεν ἀλλῆς*
 Δώδεκ' ἔσαν τέγροι Δάλαμοι ἕκστοιο λίθοιο
 Πησίοι ἀλλήλων δεδμημένοι ἐνθάδε γαμβροί
 Κοιμῶντο Πριάμοιο παρὰ αἰδοῆς ἀλόχοισιν

Iliad, lib. vi. l. 244, &c.

which we may perhaps venture to translate a little more closely, as follows:

Of well wrought stone full fifty chambers were
 Fast by each other plac'd,—within, the sons
 Of Priam slept, close to their spotless dames.
 Oppos'd to these, embosom'd in the court,
 Twelve cover'd chambers more, as nicely form'd,
 Contain'd the daughters, and their rightful lords,
 Priam's adopted, in fast wedlock bound.

Whilst at the same time we cannot but perceive, that the words *Πησίοι ἀλλήλων δεδμημένοι* twice repeated, and so cautiously used in both parts of the description, convey most obviously the idea of such sort of *small chambers*, as we read of in the Holy Scriptures to have been constructed on each side of the temple of Solomon; †—

* From the use of the word here, it is manifest, most decidedly, that by *αλλῆς* Homer meant an *open square court*, or *Atrium*.

If all the chambers of Priam's sons were placed in one row, on one side of the court, and in a building only one story high, it must have been about 500 feet square; but if we conclude, as seems most probable, that they took up three sides of the court, then it need not have been more than 200 feet square.—And upon the still more probable supposition, that there were two rows, one behind the portico on the ground, and one above, this court need not have been of more extent than 100 feet square;—or like Solomon's House in the Forest of Lebanon, of 150 feet by 75. (1 King's, chap. vii. ver. 2);—which latter dimensions would contain also sufficient room for additional apartments of state.

† 1 Kings, chap. vi. ver. 6.

of 8 feet, 9 feet, and $10\frac{1}{2}$ feet wide;—or at best of such little apartments, of 12 feet by 12, as were in common use even in Roman times, rather than of any spacious vaulted rooms.

The real account of *Priam's palace* seems therefore to have been, that it consisted of a *square court, surrounded by a portico*, with pillars, and rude entablatures all around it, much like those so lately found in the antient buildings of Egypt; over which portico, and behind it, were ranges of chambers, in general not more than 10 or 12 feet wide.

Other verses also in *Pope's translation* of the *Iliad*, in which he mentions *domes*, have just as little support for the introduction of *such an idea* in the original.

He says of *Andromache*,

*Far in the close recesses of the DOME,
Pensive she ply'd the melancholy loom.* Book xxii. l. 566.

But the words in the original, *μυχῶ δόμων ὑψηλοῦ**, have no reference to any such thing as a *dome*; for they only fairly give us the idea of a little *sequestered small chamber, in one of the towers*† of the palace.

* Lib. xxii. l. 440.

† The same observation may be made with regard to another passage in the same book, line 594, where what he calls *dome*, is found to be merely the *house* or *palace*; and where again a *principal tower*, as a most particular part of the building, is more expressly mentioned in the original, line 462.

Again, where Pope tells us of the daughters of Priam,

Whose shrieks and clamours fill the vaulted dome. Book xxiv. l. 204.

We read only plainly in the original lines 161, 166, that Priam sat in the midst of his sons *ἔδοθεν ἀύλης*, within the *Atrium*, or *Court*;—and that his daughters, and their nurses, mourned *ἀνὰ δόμας*‡, in every part of the *house*;—or throughout the *whole house*.

And the same sort of observations may be made with regard to all the several passages throughout the whole of the *Odyssey*.

In Pope's translation we find as follows:

B. i. l. 166, *to the dome.* - - -
298, *dome.* - - - -
536, *their domes.* - - -

But in the corresponding verses in the original we find,

Lib. i. l. 126, *δομοῦ ὑψηλοῦ*,—*lofty house.*
- - - - 232, 233, not one word of the kind, but simply the word *οἶκος*, *home* or *house.*
- - - - 424, *οἰκόνδε ἕκαστος*,—*each to his house.*

And as Homer indeed describes *no Arch*,—so we may now, from the observations also of the most accurate travellers rest assured, that

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| In Pope's translation again we find, | But in the corresponding verses in the original. |
| B. iv. l. 407, <i>illumin'd dome.</i> - | Lib. iv. l. 302, ἐν προδῶμῳ δῶμα, —in the porch of the house. |
| vi. 364, <i>from every dome.</i> | - - - vi. 302, δῶμος, —house. |
| vii. 57, <i>domes.</i> - - - | - - - vii. 44, ἀγορᾶς, καὶ τείχεα μακρὰ, —Forums, and long high walls. |
| viii. 51, <i>to the dome.</i> - - | - - - viii. 56, ἐς μέγα δῶμα, —to the great house. |
| viii. 495, <i>Full where the dome its shining valves expands.</i> | - - - viii. 458, παρὰ σταβμὸν τέγεῶσιν ἀπὸ πύκα ποιητοῦ, —near a post of the skilfully constructed house (or rather open building), or portico. The word σταβμὸν can hardly be strained to mean even a stone column. |
| x. 126, <i>the royal dome.</i> - - | - - - x. 111, ὑψηφές δῶ, —the high and lofty, or high covered mansion. |
| 252, <i>on the threshold of the dome.</i> | - - - x. 220, ἐνὶ Θύρῃσι θεῆς καλλιπλοκάμοιο, —at the gate of the fair-haired goddess. |
| 299, <i>echo'd from the dome.</i> | - - - - 254, not one word of the kind. —It is merely said, λίγ' ᾤειδεν, she sung sweetly, (or skilfully.) |
| xii. 179, <i>swift to her dome.</i> - | - - - xii. 143, not one word of the kind. But ἀνὰ νῆσον ἀπέστειχε, —went her way through the island. |
| xiv. 453, <i>to their lowly dome.</i> - | - - - xiv. 411, κατὰ ἤθεα κοιμηθῆναι, —in their accustomed abodes (or styes for rest.) |
| xvi. 41, <i>they reached the dome, the dome with marble shined.</i> | - - - xvi. 41, ὑπέβη λαίον ἔδον, —passed over the stoney threshold; there is not a word about any dome. |
| 360, <i>issuing from the dome.</i> | - - - - 343, Ἐκ δ' ἤλθοι μεγάρου παρὲκ μέγα τειχίον αὐλῆς, —they went out from the building, beyond the great wall of the Atrium, or (court.) |
| 450, <i>full where the dome its shining valves expands.</i> | - - - - 415, Στῆ ῥα παρὰ σταβμὸν τέγεῶσιν ἀπὸ πύκα ποιητοῦ, —she stood by a post of the skilfully constructed open building (or portico.) |
| xvii. 402, <i>distant he saw, across the shady dome.</i> | - - - xvii. 329, ἶδε Τηλέμαχος θεοειδὴς ἐρχόμενον κατὰ δῶμα συβώτην, —the divine Telemachus saw the swineherd coming along the building. |
| xviii. 247, <i>full where the dome its shining valves expands.</i> | - - - xviii. 208, Στῆ ῥα παρὰ σταβμὸν τέγεῶσιν ἀπὸ πύκα ποιητοῦ, —she stood by a post of the well constructed building. |
| xix. 2, <i>in the dome.</i> - - - | - - - xix. 1, ἐν μεγάρῳ, —in the house. |
| 231, <i>hospitable dome.</i> - - | - - - - 199, not one word of the kind. |
| xx. 193, <i>adorn the dome.</i> - - | - - - xx. 159, κατὰ δῶματ' ἐπισταμένως πονέσθη, —laboured skilfully in the apartments. |
| 238, <i>the dome re-echoed.</i> - | - - - - 189, ὑπ' αἰθέσῃ ἐριδέσσω, —under the resounding (or ec-choing) portico. |

in the celebrated city of Thebes, in Egypt,* even with all its hundred gates, mentioned by him with such admiration, there yet was not one arch.

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| B. xx. l. 259, <i>Before thou quit the dome.</i> - - - - - | Lib. xx. l. 252, not one word of the kind, we read only,— <i>Ἡ σέθεν ἐνθάδ' εἶναι ἐλεύσεται Ὀδυσσεύς</i> ,— <i>whilst thou yet remains there, shall Ulysses return home.</i> |
| 311, <i>in the dome.</i> - - - | - - - - 248, <i>ἐς δώματ', into the house, or rather, into the apartments.</i> |
| 330, <i>this dome.</i> - - - | - - - - 265, <i>οἶκος ὄδ' this house.</i> |
| 347, <i>the rich banquet in the dome prepared.</i> - - - - - | - - - - 280, not one word of the kind; we read merely,— <i>δαίνυντ' ἐρικυδέα δαΐτα</i> ,— <i>they banquetted on delicious food.</i> |
| 379, <i>no more - - - invade my dome.</i> - - - - - | - - - - 308, <i>τί μὴ τίς μοι αἰκείας ἐν οἴκῳ Φαιήϊοι</i> ,— <i>that no one should manifest insolence before me in the house</i> |
| 435, <i>swift from the dome conduct the slave away.</i> - - - - | - - - - 361, <i>δοῦμα ἐκπέμψασθε Θύραζε</i> ,— <i>turn him out from the doors of the house.</i> |
| xxi. 78, <i>this wealthy dome.</i> - - - | - - - xxi. 77, — <i>τόδε δῶμα—</i> — <i>ἐνὶ πλεῖον βίότοιο—</i> <i>this fair house, well stored with supports of life.</i> |
| 223, <i>Fast by my palace shall your domes ascend.</i> - - - - - | - - - xxi. 215, <i>οἰκία τ' ἄγγυς ἐμεῖο τετυγμένα</i> ,— <i>your dwellings built near mine.</i> |
| xxii. 29, <i>o'er all the dome they cast a haggard eye.</i> - - - - - | - - - xxii. 23, — <i>κατὰ δῶμα</i> — <i>πάσῃσι παρβαίνοντες—</i> <i>through the house (or mansion) casting searching looks every way.</i> |
| xxiii. 144, <i>the vaulted roof rebounds.</i> | - - - xxiii. 146, <i>τοῖσιν δὲ μέγα δῶμα περιστοναχίζετο ποσσίν</i> ,— <i>the great mansion resounded to their footsteps.</i> |

We may perceive, therefore, that notwithstanding Mr. Pope's free use of poetical license, by which he has so adorned his translation of *Homer*, that yet there is not, in reality, in any one of these passages, in the original words of the antient poet, (whose mind was so well stored with every idea that the days wherein he lived could possibly impart,) one single expression, from whence we can infer that he ever had the conception either of an *arch*, or of a *dome* properly so called;—whilst we may be assured, that had he ever entertained such an idea, he would have communicated it to us; and would have described both *the arch*, and *the dome*, with the most glowing energy; not merely by a simple epithet, but in descriptions, and similitudes, varied without end.

Perhaps it may not be entirely beside the purpose to add to these remarks, concerning there being no such thing as an *arch* ever mentioned by *Homer*, a curious remark of a similar kind, which occurred to *Josephus*, and is mentioned in his book against *Apion*;—that there is also no such term as the word *LAW* used in his writings.—“The very name of a

* ———— ὀψείας

Αἰγυπίας ————

Αἴθ' εκατόμυλοι εἰσι — *Iliados*, lib. ix. l. 381, 383.

Forthere can hardly rest a doubt in the mind of the curious, but that *these very gates* mentioned by the venerable bard, as well as the other great buildings of *Thebes*, must have been similar to *those* that remain even to this day, as monuments of its first and greatest splendour. And let but any one, with due attention, turn over the very instructive plates of *Norden*, and *Pococke*, and of other of our inquisitive travellers, and he will soon perceive, that no such thing as *an arch* ever could exist, in any one of those massy structures.

On the contrary he will discover, that throughout all *Upper Egypt*, the only idea either of giving strength to the internal parts of buildings, or of forming any entrance through these gates, was either that of placing immense *imposts* of stone upon *solid bulky pillars*, or else that of framing the building itself in a pyramidal form.

Each *Gate*, we find, was generally composed of two great towers like *truncated pyramids*, with their bases widely extended in proportion to their summits, standing at some little distance from each other, side by side; whilst, in the space between, the portal was formed merely by means of a vast transom stone, or *lintel*; placed at a considerable height above the ground, from pyramid to pyramid, and covering a passage of sufficient height and width to be exceedingly magnificent.

And each of these pyramidal towers contained nests of several small chambers, in each story, covered with flat stones; and piled up one upon another to the height oftentimes of six stories, or more, with such firmness, as to have defied all the devastations of time, notwithstanding their surprizing height.*

Some also of these pyramidal towers appear, externally, to have been *quite solid*; but the construction of the portal between them, was always upon the same principal.

As to the Temples, and Palaces themselves, we find they were

* *Iaw*, (ἰᾶν) says *Josephus*, was not so much as known in old times, among the *Grecians*. "*Homer* is a witness to the truth of this observation, who never uses the term in all his poems". (*Josephus*, *Contra Apionem*, lib. ii. sec. 15.)

* Of this, there is a remarkable instance in the great gate at *Et fou*, described by *Pococke* in his *Travels*, Vol. I. p. 112, Pl. XLVI.; and as to other instances of gates thus constructed at *Thebes*, and elsewhere, see Vol. I. p. 92, Pl. XXVIII.; and *Norden*, Vol. II. Pl. CIII. fig. 100. Pl. CV.; and CVI. fig. 2. Pl. CXVIII. fig. (a) and (d). Pl. CXXXVI.; and Plates CXXXVII, CXXXVIII, CXL, CLIV, CLV.

uniformly constructed of vast massy pillars, of granite, or marble, on which rested great flat imposts; which might very probably, in some instances, have had small chambers, similar to those of the *Gate Towers*, placed over them.

In several instances the great stone imposts served as a sort of beams, upon which rested other great stones placed the contrary way, as rafters are, side by side, forming a flooring for any apartments that might have been constructed above,—and some of these stones were even 40 feet in length, and at least 2 feet in thickness and in breadth.*

As the *Gates* at *Thebes* are so particularly mentioned by *Homer*; and the *Pyramids* of *Memphis* are not; we may venture to conclude, that the *Pyramids* were built *after* his time.†

Yet in the *Pyramids* themselves also, there are *no arches*, nor any thing that could properly convey the least hint, or idea, of *an arch*.—For though the magnificent high covering of the great gallery, in the largest pyramid which has been opened, has by some travellers been considered as having somewhat the appearance of an *high arched vaulting*; yet in reality nothing can be more unlike to the structure of an *arch* of any kind. For this high covering, consists merely of great stones placed one above another horizontally, on each side, and projecting, as they advance in height, each stone a little beyond that beneath it, ‡ till they nearly meet at the top; and are then, at last, covered by a stone lying flat upon the others.§

* See Norden's *Travels*, Vol. II. p. 50.—On one of these sort of floorings, over a temple at *Tentyra*, 200 feet long, and 145 broad, are now built even several huts for inhabitants, forming what has, by some travellers, been called a town. (Pococke's *Travels*, Vol. I. p. 86.); and the particular manner in which the stones as imposts, like beams, and those others answering the purpose of great rafters were placed, may be seen exactly in Norden's representations, Pl. CXII. CXV. and CXXVII. (b) And in Pococke's *Travels*, Vol. I. p. 73. Pl. XXIIV. (D),—and p. 121, Pl. L. (D),—and p. 217, Pl. LXVII.

† Accordingly we find that Sir Isaac Newton, in his *Chronology*, from quite other reasons, ventured to fix the building, of what is called the *first Pyramid*, about the year 338, A. C. whereas *Homer* wrote at least 890 A. C. that is about fifty years before. See Bp. Horsley's *Newton*. Vol. V. p. 22.

‡ See *Pococke's Travels*, Vol. I. p. 41. Pl. XVI. fig. F. *Greaves's Pyramidographia*, Vol. I. p. 123. Norden Pl. LI. fig. 6.

§ Of the various galleries in the great *Pyramid* of *Gize*, or *Memphis*, it is a circumstance well deserving of attention, that few of them are in the regular and usual direction of the passages of all other buildings; that is, advancing on a level: but are some most strangely

In short; in all Egypt, there is no such thing as an arch or dome, to be found; except such as appear evidently to have been

descending steep down; and others as strangely ascending steep up high; till you come to the very galleries leading immediately to those chambers, in which were the Sepulchres: and at the same time the dimensions of all the galleries, except the great one, are such as made it a matter of much difficulty at any time to pass along; being in general only about $5\frac{1}{2}$ feet, or at most 5 feet in width, and height, except the great gallery, in the first pyramid of *Gize*.

All this seems to have been a most artificial contrivance, merely to prevent posterity from ever getting access at all, to disturb the ashes of the dead; when once the pyramid should have been closed: and seems to have been merely a *subsequent* improvement to the mode of construction of the more southern pyramids of *Sakkara*, or *Dagjour*, and *Medum*; (Norden, Vol. I. p. 81;) and therefore tends to prove, that the pyramids of *Memphis*, or *Gize*, must have been of a much later date than those which were nearer *Thebes*.

One of those Southern Pyramids, is built of materials exactly similar to those which we read, were used in Egypt, during the time of the bondage of the Israelites; that is, of bricks formed of clay and chopped straw, and dried in the sun. (Pococke Vol. I. p. 53) from whence we may draw an inference, that this was constructed nearly about *that age*; and of course may conclude that the others were reared between the time of the Israelitish bondage, and the age of Herodotus.

The peculiar construction of one of the more antient Pyramids at *Sakkara* that has been opened, deserves to be compared with that of *Gize*, to afford us more light upon the subject. There was here at the first entrance a narrow passage, very little more than 3 feet wide, and descending very steep downwards;—at the end of which, was a chamber, $22\frac{1}{2}$ feet long, and near 12 wide, (Norden Vol. I. Pl. LXI. fig. 2.) and very high; covered above (as the great gallery in the Pyramid of *Gize* is) merely by the stones of the walls on each side (all of which are laid horizontally) projecting each about five inches more than the tier immediately below, till they very nearly meet at the top, where they are covered by a flat stone. This room, however, appears not to have been actually the repository for the dead; for, on examining more closely, at a great height, in the flat end wall, and so very near the top, as not to be approached except by a ladder; was discovered a narrow door, that leads, by a second confined passage, to another room of similar construction.—On the right hand of the first entrance of the first room, is again a narrow passage, leading to just such another room; and in the end wall of that, in like manner, at a great height near the top, is also a similar doorway, leading to a more inward, and hidden chamber, in that part also.

Plans and Sections shewing the manner of the setting in of the stones; and how remote the style of architecture really is from conveying the idea of *an arch*, may be seen in Pococke's Travels, Vol. I. p. 52. Pl. XIX. fig. E, D.

Such was the caution used, to conceal the innermost recesses of these earlier pyramids;—and in the obviously *subsequent*, great pyramid, at *Memphis*, or *Gize*, we find still further, a sort of contrivance yet more artificial.

For here was first, over the entrance of the galleries, a designed *false portal*, (but without the least resemblance of *an arch*) intended manifestly to mislead, if ever the pyramid should be uncased from its intended outward covering of stone, or granite; and even this

constructed after the time of the Ptolemies; as those arches plainly were, which are now found in some parts of the bridges, or cause-

false portal itself, if the pyramid had ever actually been completely cased, would probably hardly ever have been discovered, any more than that of the second, or of the third pyramid, now is, at this present hour;—and when it was discovered, would after all have been found no real entrance.—It is represented by Norden, Pl. XLIX. and Pl. L. at a. b. and instead of there being any passage through it, all is solid;—only quite *beneath* it, (and where few would ever think of looking for such entrance, when once it had been closed with a proper stone,) is a narrow passage, or gallery, whose mouth is no more than three feet square, and which is made descending with a slope $92\frac{1}{2}$ feet in length, so steep down, that if a person's foot once slips, it is impossible for him to recover his steps: whilst at the bottom of this first passage, or gallery, is a second, about 5 feet wide and high, rising again with an ascent, 110 feet in length, and nearly as steep and dangerous, as was the descent of the former. And it not only appears that these galleries were *intended* to be closed entirely by blocks of stone, or marble, let to slip down in each, and to meet at the lower point; but indeed this second gallery, to which it was surely much more difficult to convey any stones proper for the purpose, than into the first, actually has been, and does still remain so closed at the bottom, by great blocks of granite, which one would therefore think must have been previously reserved loose, for this very end, in the third lofty gallery above. They still so completely close the bottom of the second gallery, that there is no access, but by means of a sort of mining breach, forced through the original solid mass of the pyramid, over the top of these stones, 89 feet in length; as may be seen imperfectly in Pococke's Representation, Vol. I. p. 44 and more exactly in Norden's Representation, and Section of this part, Vol. I. Pl. L. c. d. e.

Beyond this second gallery, is found, in an horizontal level direction, a third gallery, not much more than 3 feet wide and high; but 110 feet long; leading on a level directly to the lower chamber; which is about $17\frac{1}{2}$ feet long, and near 16 broad; and between 15 and 20 high: and is either covered at the top, nearly in the same manner as the rooms in the Sakkara pyramid are, (by means of stones laid a little projecting each one over that beneath, till they meet at the top), or else as Dr. Shaw suspects, p. 369, is hewn out of the solid rock. Its *vaulting*, as it is improperly called, being allowed by all travellers who describe it to be quite *triangular*; (Pococke, Vol. I. p. 237, 44. Norden, Vol. I. p. 74) and such as could never serve to convey rightly the idea of an arch, or of a dome, or of the principles on which the strength of the arch depends, either to those who constructed it, or to those who afterwards viewed it.

A little above the entrance of the narrow gallery leading to this lower chamber; is the entrance to that stupendous work of antiquity, the great gallery of all in this pyramid; which rises with an exceeding steep ascent. Its length is about 154 feet, and its height is 26 feet, but its utmost width is only 6, (Pococke, Vol. I. p. 44, and Greaves, Vol. I. p. 122.) The supposed *vaulting* of this, is what has just been referred to, as a proof of the non-existence of *any arch* in the pyramid;—and the manner in which it is formed, by means of seven tiers of stone, on each side, that are placed horizontally one above another; each row projecting three inches more than that immediately below, till the two

ways, leading to the pyramids; and on which are even *Saracenic* inscriptions.*

sides approach within about 3 feet of each other at the top, and are then covered by other stones, placed horizontally upon them, may be seen in Norden's Travels, Vol. I. Pl. LI. 6; and in Greaves's Pyramidographia, Vol. I. p. 146; and Pococke, Vol. I. p. 44.)

From this lofty gallery, is again a low narrow entrance, to a sort of vestibule about 14 feet long, 3 wide, and 10 high, divided into two parts, by a slab of red marble suspended 3 feet above the pavement, in two grooves on the sides, like a sort of porticulis, or sluice, (Greaves, p. 124,) and from hence another short, low, narrow entrance leads into the great chamber of state, where is the Sarcophagus.—This room is 34 feet in length, 17 in breadth, and 19 in height; and here, therefore, an *arched* vaulting would surely much rather have been introduced than any where else in the structure, if the nature of such vaulting had indeed been at all understood, or attended to.—But here, just as in the first very low galleries, the covering is flat, and formed only by means of nine immense stones laid from side to side.

This long, and particular detail, has been thus given, for the sake of shewing the more fully, that *no arch*, or even any thing that can lead us to conclude that the builders at all understood the principles on which *an arch* is constructed, appears in this *pyramid*, any more than in the other ancient buildings of Egypt that were prior to the time of *Julius Caesar's* attack on *Alexandria*. And before we quit the subject entirely, one other circumstance that has not been hitherto generally adverted to, ought to be mentioned; and this is, that all the parts of the walls of the galleries appearing to be framed *quite close*, and without any possible communication with the external air, except by means of the small narrow mouth of the first gallery of entrance, it is, upon philosophical principles, almost impossible to account for the air in the great chamber not being quite stagnant, so as to destroy life;—and especially when we consider how much, and how frequently, its vital principle must have been lessened, by the torches, and breath of visitors:—and therefore I cannot but conclude, that the two small *apertures* discovered, one on each side the great chamber, (concerning which *Mallet* formed such strange conjectures, see Pococke's Travels, Vol. I. p. 240, and which are described by Norden, Vol. I. p. 75, Pl. L. fig. (f.) and Pl. LI. fig. (e.)—) were for the express purpose (by means of some winding ducts) of procuring an insensible circulation of air, which is not even yet prevented.

The Pyramids of *Gize*, were most probably built nearly about the time of *Isaiah*; which is perhaps the reason that they are no more taken notice of by that *divine Prophet*, than by *Homer*.

They are most justly deemed to have been constructed, about seven or eight hundred years before our Lord's Incarnation; and this is long enough *before* the time of *Herodotus*, (being at least three or four hundred years,) for him to speak of them as ancient, in the manner he does;—and yet it is not too long for there being *then* still existing a tradition, concerning the *interior chambers*, then closed up from view; though it was only preserved in that *imperfect manner*, in which we find he has given it to us. (Herodotus, Lib. II. p. 124: 136, *Wess.*)

* See Norden's Travels, Pl. XLIV. Vol. I. p. 80.

In the celebrated *Labyrinth*, whereof Herodotus speaks in such hyperbolic terms ;—although his description (as being written at a time when every one had access to it,)* is so very concise as not to convey a full explanation of all its parts ; yet we may learn, even from what a mere instant admiration alone led him to declare concerning its general plan, that there was no such thing as an *arch*, or *dome*, in the whole structure.

One of his translators, † indeed, inadvertently says, translating according to our more modern European ideas ; that this building contained *twelve vaulted halls*.—But, in the original Greek, there is no such intimation ;—and this a more accurate translator ‡ of

We understand, from him, expressly, that the great Pyramid was continuing *still closed* in his days.—And this alone is sufficient to remove all doubt of its having been really a *tomb*. Whilst as to *Dr. Shaw's* objection, that mummies were always placed standing upright, and not lying in Sarcophagi of stone, or marble, (See *Shaw's Travels*, p. 371,) that can have no great weight ; since we find the sepulchres of the antient Kings of Thebes, were actually such *Sarcophagi*, in many instances ;—(see *Pococke's Travels*, Vol. I. p. 97. Pl. XXX. XXXI. XXXII.) on the lid of one of which is still actually remaining the figure of a Mummy cut in stone.—and whilst as to the imagination that this Pyramid was once a Temple ;—*that conjecture* if indulged any further than to allow that *tombs* were often deemed *sacred*, must seem most wild indeed.—For if this pyramid was a *Temple*, then all the rest of the Pyramids must also have been temples too ;—and it is impossible to conceive, either that so many temples should be built so near to each other ; or that so many should be *still so completely and inaccessibly closed*, as to have prevented any possibility of entrance for so many ages. To say nothing of the strange inconsistency of supposing these to have been *Temples* ; when *real Temples*, of a far different construction, not only co-æval with them, but prior to them, do still remain in so many parts of *Egypt*, to assure us fully what the *form*, and the *mode* of structure of edifices designed for such purpose really was.

The editor of *Norden's Travels* conceived that the *Pyramids* must have been prior to the construction of the *Temples* at Thebes, because *fossil shells* were found on their summits ; and because there are found in them, no carved hieroglyphic figures. But it should be remembered that the appearance of the fossil shells is to be accounted for, much more satisfactorily, from such having been embedded, *before* the flood, in the very stones themselves of which the Pyramids were built. And the non appearance of hieroglyphics may be accounted for, from their being deemed too sacred to be used on sepulchres, except merely on the bandages of the sacred mummies. None are ever found on the exterior sycamore coffins ; neither have any been ever found, in any of the Catacombs.

* It was erected a very little more than two hundred years before *Herodotus* read his work to the persons assembled at Athens, to celebrate the Olympick Games, in the year 445 A. C.

† Littlebury, Vol. I. p. 224.

‡ Beloe, Vol. I. p. 399.

Herodotus plainly saw, and has therefore translated the words, more cautiously ;—saying only, that there were *twelve courts* ; *all of which were covered*.—Whilst a close attention to the general style of antient buildings, will shew us, that even *this covering* implied only, that there were *covered walks*, or porticos, all round each court.

The words of Herodotus are ἀλλὰ κατώστεγοι,*—and these very words alone, might induce us to conceive, that he meant merely to describe *twelve open courts* ; †—somewhat similar to the great court of the *Palace of Priam*, celebrated by *Homer* ;—or to the courts of *Solomon's* magnificent houses ;—but which were covered indeed around on every side, by means of being surrounded with porticos, supported by pillars of white stone.—And this idea seems to be confirmed, in the strongest manner, by what Herodotus says still more clearly, towards the end of his description ;—for there he expressly tells us,

Ἀλλή δὲ ἐκάστη περίστυλος, λίθου λευκοῦ ἀμοσμένον ταμῆλιστα

That to each court was a PERISTYLE (or a space incompassed with a row of pillars) of white stone most exceedingly nicely adjusted.

So that, most evidently, *the Labyrinth* consisted of twelve great areas, or courts, surrounded with open porticos, that were supported by pillars of white stone, or marble ; which pillars, we may plainly apprehend, were immediately covered at the top, first with single square blocks of stone,—then with imposts, or transom stones, from one pillar to another ;—and then with great stones laid the contrary way from one transom to another ; exactly according to the usual manner of antient *Egyptian Building*.

Behind these porticos, which stood on the ground ; and again *over* these porticos above ; were constructed, in all, fifteen hundred

* Κατώστεγος, seems most properly, according to the idea which *H. Stephens* has given us of the word, and of its *etymology*, to signify a *mere covered way*, or *open portico* ; somewhat similar even to the open porticos of the Romans. See *H. Stephens*, Tom. III. c. 974, A.

† Herodotus, Lib. II, 148. p. 176 Wesselingii. They have sometimes been considered as twelve distinct Palaces : and each of them are said to have contained one hundred and twenty-five rooms. But, after all, this is not more than about the number of apartments in one of our old noble seats, (such for instance as *Haddon House*, in *Derbyshire*.) where also the rooms are much larger.

apartments ; which, (even from their number alone,) we may be assured must have been, for the greater part, of very small dimensions ; as we find they were all included, with their twelve courts, within *one complete wall* of inclosure, so as to be considered merely as one single building.

And as a further proof that there was *no arch*, we are told by Herodotus, who saw them himself, whilst the whole structure was entire, that the ὀροφή, the covering of *every one of them*, as well as the walls, was of *stone* ;—from whence (considering the proper meaning of the word ὀροφή,*) we cannot but conclude, that it was merely a *flat covering*, like that of the great chamber in the pyramid, consisting of long flat stones resting on the side walls.

With this account of *Herodotus*, and like it confirming the total want of arches in the Labyrinth, do very well agree, even the imperfect remains, which *Pococke* saw of this building, after the devastation of so many ages :—for from his slight representation of a *part* of its outward wall, we further learn, that this was built somewhat *sloping inwards*, like the side of a truncated pyramid ;—and also that one of the larger and better rooms, which then remained, was still actually covered *with large stones, of such a length as to be laid from wall to wall.*†

* Ὀροφή signifies properly,—merely *contignatio*,—a *framing of timber work* ;—or *raftering* ;—and only indirectly a *flooring*.

† *Pococke's Observations on Egypt*, Vol. I. p. 63 ; see also p. 61, and Pl. XXII. and XXIII.

There cannot surely be a stronger proof, that no palaces, constructed on any better plan, existed in the time of *Herodotus* ; than the admiration with which that Father of History speaks of this most confused, inconvenient building ;—a structure that after all, appears to have been only two stories high :—each containing a vast number of rooms indeed ; but such as were in general very small ; and were put together so irregularly, and so ill disposed, that, in the lower story, they stood merely in each others way ;—(many of them incapable of admitting light any more than mere dark Catacombs) ;—whilst those above, were more remarkable for the celebrated confusion their numerous doors occasioned, than for any other circumstance.

His description is such,—that the Incas Palaces of *Peru*, described by *Ulloa*, (Vol I. p. 499, 501.) have nearly as great a claim to elegance and magnificence of design, as this celebrated *Labyrinth*.

Since, therefore, the magnificence even of such princely buildings, was on so unimproved a plan, in those very early days ;—it is no wonder that private mansions were of so very slight a kind, as to deserve no particular mention at all.—They must have fallen very

Perhaps our observations concerning the total want of arches in the most antient buildings of Egypt should not now be closed, without remarking, that the Pyramidal gates of Thebes, and in other parts

far short indeed of the convenience, and appearance, even of very indifferent habitations in any modern city.—No arches therefore can be supposed to have existed in such private buildings, either in *Egypt*, *Thebes*, or *Babylon*.

It appears plainly from the account Herodotus gives, (Lib. v. 101, p. 428 Ed. Wesselingii,) of the city of *Sardis*, the great seat of antient luxury, and the residence of *Croesus*; that the bulk of the inhabitants of all the various classes, dwelt in houses not much better than small huts, and hovels: and indeed of such a kind, that a city, composed of mansions of a like construction, might soon be built any where, almost as easily as a camp is formed.

Ἔσαν ἐν τῇσι Σάρδισι οἰκίαι, αἱ μὲν πλέυνες, καλύμναι ἕσαι δ' αὐτέων καὶ πλώθναι ἕσαν, καλύμναι ἄρχον τὰς ὀροφάς.

The houses of the Sardians were for the most part constructed of reeds;—and these of them that were built of brick had yet reeds for their covering above.

The description is such, that one might almost imagine it was the description of the houses of the *Birmans*, in *Ava*, and *Pegu*; with the accounts of which it deserves well to be compared. And indeed it is a most interesting circumstance in the history of mankind, to observe, how similar circumstances produce similar effects, almost every where;—and how several very antient customs, lost in the countries where they once prevailed, have been adopted, and are preserved conspicuously, in remote regions.

The *Birman* houses are all made of mats, and sheathing boards, supported on bamboos, or posts, raised between three and four feet from the ground, and indifferently thatched:—whilst a bamboo palisade incloses a court sufficiently spacious. The habitations, built in this manner, and provided for *Colonel Symes*, were found even comfortable and commodious:—one of them consisted of three small rooms, and a hall; and was completed by fifty or sixty labourers, in a little more than four hours;—not a nail was used in the whole edifice, the parts being all tied together by the ground rattan; and the floor formed of bamboo grating, covered with mats, and carpets.—There are not even any brick buildings, in that country, except such as belong to the King, or are destined to their religious superstitions:—and hence it comes to pass with them, as it did in antient times in the east, that on a sudden conquest, or change of dominion, a city soon becomes utterly deserted, and the houses, on the first order for removing, are easily transported to a new city. (See *Symes's Account of Embassy to Ava*, Vol. II. p. 19, 60, 190, 271, 282.)—To this hour, in many other parts of the East, and especially in *India*, the houses of the common people consist of one floor only. (See *Rennell's Remarks on Herodotus*, p. 343, 344.) And we may therefore very reasonably believe, especially if we recollect the history of *Tobit*, and the remarkable words of the prophecy of *Ezekiel*, (*Tobit*, chap. ii. ver. 9. *Ezekiel*, chap. xii. ver. 5, and 7.) that the greater part of the houses both at *Nineveh*, and at *Babylon*, were very nearly such as those of *Sardis*, and that when Herodotus says (Lib. i. 180, p. 85, Ed. Wesselingii.)—τὸ δὲ ἄριστον αὐτῶν ἐν πλῆθι οἰκίῶν τριωρόφων τε καὶ τετραωρόφων.—that its principal part was full of houses of three and four stories in height;—or rather with three or four raftered coverings;—he only intended to convey a more exalted idea of that proud city, by intimating that it abounded with

of Upper Egypt, have a most striking affinity to those remarkable structures that are often found reared over the gates of some of the most antient pagodas, and choultries, in India.—And those kind of Egyptian gates most particularly have this sort of remote connexion, which are constructed under one lofty pyramidal tower, * instead of being placed between two pyramidal towers.

To which remark we may add, that whilst some of the Temples and buildings in Egypt had, even in the external structure of their walls, an approximation to the form of a truncated pyramid, † the outline of some of the great Indian Pagodas, and particularly that of *Tanjore*, ‡ has no less remarkably an affinity to this form; and that even in so very great a degree, as almost, in the outlines of its structure, to resemble the Egyptian Pyramids themselves;—whilst neither in the one, nor in the other, are there any *arches*.

Palaces, and distinguished Public Buildings:—to say nothing of the possibility, that this expression of Herodotus might merely refer to such sort of buildings as we know were common in many parts of *Asia*; where by way of ornament, and sometimes as a badge of dignity, *double*, or *triple roofs*, were raised *like tents*, or *umbrellas*, one above another, but not forming any distinct stories of rooms.

Such are still found in countries remarkable for *unchangeable manners*; as particularly amongst the *Chinese*, and the neighbouring countries:—and here again the account of such as are constructed amongst the *Birmans*, in *Ava*, and *Pegue*, well deserve to be referred to;—though that country cannot well be supposed ever to have had any immediate connection with the *Babylonians*.—But they deserve to be referred to, as a further proof, that useful illustrations of the earliest usages in the most distinguished regions of the world, may often be obtained even from very remote parts of the globe, where want of intercourse with the rest of mankind, has prevented such from being even yet obliterated.—These sort of roofs are composed of distinct stages, one above another,—the highest in the centre,—and are never placed on any houses, except on those of persons of high rank, (Symes's Embassy, Vol. II. p. 282, Vol. III. p. 47.

* Instances of this kind may be seen in Norden's Travels, Vol. II. Pl. CIX. Pl. CXXVII. (b) and in Pococke's Travels, Vol. I. p. 88, Pl. XXVII. F. and p. 92, Pl. XXVII. fig. 2.

† Instances of this may be seen in Norden's Travels. Pl. CXV. CXLVII. fig. 2. and Pl. CXLVIII. CL1. and even in the remains of the Labyrinth, in Pococke's Travels, Vol. I. Pl. XXII.

‡ A most curious representation of this edifice was published by Mr. Dalrymple, in 1776.—And this circumstance of its pyramidal form, has been accurately attended to, and compared with that of the Pyramids of Egypt, by *Major Rennell*, in his interesting Remarks on the Geography of Herodotus, p. 560.—And it ought not to be forgotten (whoever the Mexicans might be descended from) that the Great Temple at Mexico, as described by

There is also another instance of conformity in the style of the most antient Indian Hindoo buildings with those of Egypt, which equally excludes all idea of the existence of an *arch*; and that is, that in the Indian *choultries*, the massy roofs of stone are quite flat, and supported upon vast pillars, very nearly in the same manner, as those of the *Thebaic* temples;—and in some of the most antient of the Hindoo Pagodas, the efforts towards forming a *dome* are so far from having been ever connected with any idea of an *arch*, that the construction is merely in a manner similar to the construction of the roof of the great gallery in the pyramid of *Gize*;—that is, by means of the stones of the side walls being so laid, as to project inwards, each upper row a little more than that beneath, till only a small aperture is left at the top, covered by a single stone.*

Joseph de Acosta (*De Solis's Hist. of the Conquest of Mexico*, Vol. I. p. 321.) was also of a pyramidal form.

It is a matter of curiosity also, to trace the same attachment to the pyramidal form, in the structures of Pegue, and the kingdom of Ava, (which are situated between India, and China,) and even in some of the Pagodas of China itself. The great Pagoda of Sioemadood in Pegue, is a pyramidal building, composed of brick and mortar, without excavation or aperture; standing on two vast terraces of earth, placed one above the other, and reaching to the height of 361 feet. See *Symes's Embassy*, Vol. II. p. 63, 65, 68.—and it is almost remarkable fact, that so great a veneration for the pyramidal form in their religious structures, seems constantly to have been retained in India, that even one of their modern edifices, actually constructed both with arches, and arched domes, yet has been so contrived, that outlines drawn from the summits of the highest central dome, and touching the outsides of all the rest, from the top to the bottom of the building, would nearly compose the figure of a pyramid. *Hodges's Travels in India*, p. 20.

The brick Pyramid of *Medoun*, which the most nearly resembles one of the Pagodas just mentioned, is not only deemed one of the most antient, but is also the most southerly of all the Pyramids of Egypt;—for none are found in Upper Egypt, where chiefly are the remains of the celebrated temples.—As therefore Dr. Shaw did adopt an idea that the Great Pyramid was a Temple, (see his *Travels*, p. 370, 4to.) and as Herodotus actually describes two images to have been placed, one on each summit of those two pyramids, that once stood *in the lake of Maris*, (See Herodotus, Lib. ii. 149, p. 177) we may perhaps venture to assent so far to his ideas, as to suspect that possibly the Pyramids of Egypt might indeed, originally have been considered in a double light;—as sepulchres *within*, and as a sort of sacred temples, or (as the Indians would call them) pagodas *externally*, consecrated to the honour of departed kings, buried in them;—and built in conformity to a superstition introduced into Egypt subsequent to the more antient superstition, that prevailed in the more early ages when the temples of *Thebes* were reared.—

* Most interesting specimens of this sort of antient *Hindoo* architecture may be seen in

As there appear to have been *no arches* in the antient buildings in Egypt, so also we have reason to conclude, that in the magnificent structures at *Babylon* there were none.

Concerning its great bridge over the *Euphrates*, *Herodotus* expressly tells us,* that it was built first of stones bound together with lead and iron; upon which were laid—ἔδρα τετραγώνων,—*squared beams*.—It must therefore plainly have consisted merely of a certain number of stone piers, with timbers placed from pier to pier.

And that there were *no arches*, in the *gates* of its walls, is most decidedly apparent, from the *particular* words *Herodotus* makes use of; and from the precision of his account.

For he says,† that in the compass of its walls, there were an hundred gates,—*all of brass, even their posts, and their upper lintels, in like manner*.

Χάλκεαι πᾶσαι καὶ σταθμοὶ τε καὶ ὑπέρθωρα ὡσαύτως.

where the peculiar word ὑπέρθωρα, *upper lintels*, excludes utterly every idea of an arch.

Neither can we conceive it possible, that there should have been any arch, even in the *little gates*, πύλῆες, on each side next the river; both because we are expressly told the wall, on each side next the river, was merely ἀμυσιὰ, not τείχος, which expression conveys properly the idea of a *low wall*; or mere sort of *rampart* or *breast-work*: and also, because the gates themselves are so particularly described as *being very small*.

Diodorus,‡ indeed, besides the bridge, describes a subterraneous covered passage under the *Euphrates*; by means of which, the Queen could pass from the old palace to the new palace: a distance that, according to *Strabo's*§ account, cannot have been less than the extent of a stadium:—and this passage has been supposed to have been *arched*.

Mr. Daniel's curious engravings, and drawings. A specimen also may be seen fairly copied in *Mr. Maurice's Indian Antiquities*, Vol. VI. Pl. II. representing the Pagodas of Deogur. See also *Hodges's Travels in India*, p. 94.

* Herodotus Wesselingii, lib. i. 69, p. 88. + Lib. i. 179, 180, p. 84, 85.

‡ Diodorus, lib. ii. 69. p. 122. Wesselingii Ed.

§ Strabo, lib. xvi. 738. p. 1073. Casaubon's edition.

But when we come to examine the words of *Diodorus*, with more minute precision, we may perceive, that although it might be deemed (just as in common apprehension the great gallery in the pyramid is,) to have been indeed *vaulted*; yet that *no real arch* was introduced in the construction;—and that the closing of the *vaulting* above, was merely by a gradual approximation of two straight sides, sloping towards each other, by means of every incumbent brick being made to project a little further than that immediately beneath it, till they met so near, that the breadth of a brick* would be sufficient to close and join them at the top.

The words are, ——— *Ἀποστρέψασα τὸν ποταμὸν, κατεσκεύασεν ἐκ τῶν ἐπὶ τῆς βασιλείων εἰς ἄτερα διόρυγα. — ἐξ ὅπτης δὲ πλίνθου συνοικοδομήσασα τὰς κμαίρας, ἐξ ἐκλίτρον μέρους ἀσφάλτω κατέχρισεν ἠψιμένη, μέχρις οὗτου πλάτος τοῦ χρίσματος ἐποίησε πηχῶν τεσσάρων. — τῆς δὲ διόρυγος ὑπέρχον οἱ μὲν τοῖχοι τὸ πλάτος ἐπὶ πλίνθους ἕκκοσι — τὸ δὲ ὕψος, χωρὶς τῆς κμαφθείσης ψαλίδος, ποδῶν ὀκτώδεκα, — τὸ δὲ πλάτος, ποδῶν δεκαπέντε.*

And a little close attention to the exact meaning of every expression in them, will remove all doubts.—A literal translation will be as nearly as possible as follows :

Having turned the river, she formed, from the palaces on each side, a great trench.—And building (τὰς κμαίρας) covered ways of dried brick; on each part she placed melted bitumen,† till on each she made the thickness of the layer four cubits.—The walls of the trench, on the sides, were of the breadth of 20 feet (i. e. 20 feet thick) and the height, exclusive (κμαφθείσης ψαλίδος) of the inclined forceps part, (or of the sloping sides of the vaulting) was 12 feet, and the breadth (of the clear passage) fifteen feet.

Here we find in the first place, all the difficulties removed, with regard to the mention of *two different breadths* of 20 feet, and of 15 feet, which have occasioned mistakes in the apprehensions of some translators.

* It appears from the recent examinations of travellers, that the dimensions of the bricks of which the palaces on each side the river were constructed, was $1\frac{1}{2}$ foot square. See Major Rennell's Observations, p. 375.

† From these words, I should conclude these *layers* of bitumen to have been spread not on the *insides* of the walls, where they faced each other; but on the *outsides*, next the solid earth of the trench, to prevent the soaking in of the water.

And in the next place, this plain translation clearly leads us to apprehend, that here was *no arch*;—since there is not the least intimation in the whole description (though so minute) of any such thing; but on the contrary, an actual intimation of sides gradually sloping inwards, towards each other, in the upper part.

And further, by thus translating the words in the closest manner, we may also perceive a striking similarity between the very *mode of construction* of this vaulted covered passage under the *Euphrates*;—and that of the covered ways under the *Hanging gardens*;—whilst there is a near resemblance in both to the mode of covering the vaulted gallery in the pyramid;—and also to the mode of covering several apparent vaults, and domes, in the most ancient Hindoo buildings in India:*—a mode that seems to have been universally the substitute for *vaulting*, for ages before the use of *the arch* was introduced.

And that such was really the kind of covering, or vaulting of this passage, is greatly confirmed, by the account which modern travellers give us of what still actually remains of another covered passage on the very site of Babylon, near the Euphrates.

For in a fragment of a wall, deemed to have been about 60 feet thick, that ran perpendicular to the bed of the river, was discovered a *subterranean canal, which instead of being arched over, was covered with pieces of sand stone, six or seven feet long, by three wide.*†

There appears, therefore, most plainly to have been *no arch*, either in the bridge over the *Euphrates*, or in the subterraneous passage underneath.—And in like manner, there is not any thing said that conveys in reality the least idea of an arch in any one building, in the whole city.

One of the translators ‡ of *Herodotus* indeed tells us, in describing the *great tower*, and temple of *Jupiter Belus*, that within the uppermost tower of all, a *spacious dome* was built:—but on consulting the original words, we find no such intimation;—they are merely §

* It may be recollected, that the rude covering of the dome, and passages, in the great Barrow, at New Grange, in Ireland, in the county of Meath, were rude imitations of this sort of construction. See Vol. I. p. 288, 292.

† See Major Rennell's Account, in his Remarks upon Herodotus, p. 369.

‡ Littlebury, Vol. I. p. 113.

§ Herodotus, Wesselingii, lib. i. 181, p. 85.

—*μηδὲς ἔπεισσι μέγας*,—simply informing us, that in the uppermost, or finishing tower, there was a *great temple*;—in which it is added was placed a great and splendid bed, and a golden table.

Instead of any intimation concerning *an arch* in the tower, it appears, on the contrary, from the whole tenor of the description, that the interior part of the structure, beneath this building on its summit, was one solid mass, without any open space or cavity left in it;—and that there was not hardly any room at all left for apartments, in the lower part of the tower, even on its sides:—for we are told, that the mode of going up, was by a regular winding ascent, *on the outside*; and that *in the midst was*—*πύργος στερεός*,—*a mere solid tower*;—which seems plainly to intimate, that though there was indeed the appearance of *eight towers*, one above another, yet that all *beneath* the cell of the temple on the summit, was entirely one solid mountainous pile of earth and brick-work;—at least in all the central part,* whatever apartments might be constructed on the sides of the ascent; and that therefore there were no *arches* for support.

* It is a matter of interesting curiosity, to observe this mode of constructing *the central part of a lofty building quite solid*, to have been continued amongst remote Eastern nations.—The great Tartar temple *Poo-ta-la*, at *Zhe Hol*; of which a plan and elevation is given in Sir George Staunton's account of *Lord Macartney's Embassy to China*, Vol. II. p. 258, Pl. XXVI. XXVII.; is found to have been of this kind.

This vast temple (the original design of which, probably, was derived down to the *Tartars*, from the very ideas remaining in the world of those first efforts of mankind in architectural buildings that were manifested in the plains of *Mesopotamia*, and *Chaldea*) is 200 feet square; and about as much in height, having eleven stories; and appears to consist of a vast mass, or tower of *mere solid brick-work in the centre*;—upon which, as on a rock, the *golden chapel*, as it is called, stands above;—whilst the apartments of the priests, and the stairs of ascent, surround this internal solid mass, like a shell on all sides.

And it is very remarkable, that the very building, near *Old Seleucia*, in the plains of *Mesopotamia*, called to this hour *Nimrod's Tower*; and which has, by some modern travellers, been mistaken for the antient tower of *Babel*, does at least exactly conform to this idea; for it consists of one solid mass of brick-work, containing not less than 100,000 cubic feet; and seems to have been exactly what formed *the central solid part* of just such a kind of tower as that in Tartary, at *Zhe Hol*; whilst the materials correspond exactly with the account of the mode of building of the tower of *Babel*.

This ruin near *Seleucia*, is 126 feet in height; and now, only about 300 feet at bottom, measuring all round, close to the part that remains above the rubbish;—but seems to have been in reality originally 100 feet square;—there is only one appearance of any sort of aperture, or opening in any part of it; and that is seen near the top; whilst the extent of

Still more remarkable is it, that even in the celebrated structure of the *Hanging Gardens* there does not appear to have been *any arch*.

Modern writers indeed, and even that celebrated one, *Dean Prideaux*, mistaking the words of *Diodorus*, tell us,* that “the whole pile was sustained by vast arches, built upon arches one above another; and strengthened by a wall surrounding it on every

ruin at the base, shews it had contiguous additional building on every side. The bricks are all placed square, as for a square building;—and are themselves, 12 inches square, and $4\frac{1}{2}$ thick.—The cement is of mud, or slime, mixed with broken reed, as we mix hair with mortar; which slime, *Ives* says, might either have been had from the great rivers, or have been taken out of the swamps in the plain, with which the country abounds;—and betwixt every seventh or eight brick in the tower, is a layer of reeds. A view of this extraordinary remain, may be seen accompanying the description (in *Ives's Journey from Persia*, p. 298.)

And perhaps here it ought to be added, that bricks have lately been brought from the ruins of Babylon, of 12 and 13 inches square, and of 3 inches thick, which were evidently dried in the sun, and not burnt; and have still inscriptions remaining impressed upon them, in characters greatly resembling those on the remains of Persepolis:—and that some of them also have the figure of a lion impressed;—and have retained marks both of the bitumen placed between them, and of the reeds placed between them, and even of the mats on which they appear to have been sometimes originally dried.

Modern travellers inform us, that in the ruins of that which evidently appears to have been the real Babylon, are also found sun-dried bricks about $1\frac{1}{2}$ foot square;—and that in some of the ruins, the layers of reeds appear to have been between every course of bricks;—and in some only between every sixth or seventh course.—(Which circumstances are particularly remarked in Major Rennell's very curious Observations on Herodotus, p. 353, 364, 367, 371.)

Perhaps it ought also here to be added, that the present remain of the celebrated Tower of Babel, or Temple of Belus, appears to be a vast irregular mount of about 660 by 640 feet, and 200 at least in height;—its base probably including ruins of some surrounding buildings.

And I cannot conclude this note without observing, that most probably the very reason why the *same characters* appear in the ruins of Persepolis, that are found on the bricks brought from the ruins of Babylon is, because the characters used by the most antient Babylonians continued actually in use, till the time of Darius Hystaspes, who, there is every reason to believe, built Persepolis.

These characters have a strange affinity to the Chinese, inasmuch as each one seems to signify an whole word.—They were probably, such as formed the most original kind of writing in the world:—and consistently with the idea of each character denominating a word, we may perhaps venture even to conclude, that hieroglyphics instead of being *prior* to this kind of writing, antient as they are, were only a more refined improvement of it, for the use of the learned; and for the purpose of declaring in a more solemn manner, the most recondite mysteries.

* *Prideaux's Connection*, Vol. I. p. 145, octavo.

“ side, of 22 feet thickness ; ”—but when we come to examine the words of the original, with due caution ; we find *this* was so far from having been the case ; that it appears, from what is said of *the mode* of rearing the structure, there could not possibly have been *any arch* in it.

The manner of forming the—τὰς ὀροφὰς,—*the roofs*,*—or tops of the *cavities* in the mass, Diodorus says, was by their being first covered with—λίθιναι δοκοὶ—*beams of stone* : †—τὸ μὲν μῆκος σὺν ταῖς ἐπιζωλιαῖς ἔχουσαι ποδῶν ἑξ̄ και δέκα, τὸ δὲ πλάτος τεσσαράκων—*whose length with that of the parts that rested on the side walls, —(for so surely we ought, from the consideration of the nature of all the most ancient eastern buildings, to render these words, —whose length, with that of the parts that rested on the side walls, was 16 feet ; and their breadth 4 feet ; —and the structure resting upon these stones, was composed first of a layer of reeds, mixed with much bitumen ; —then of a double layer of bricks, cemented together by plaster ; —and thirdly, of a covering of thick sheets of lead, that no moisture might penetrate ; —and over these sheets of lead, was laid such a depth of earth, as should be sufficient for the roots of the largest trees.*

Nothing then can be clearer, from this whole description, than that whatever *concamerations*, or *vaults*, there were in this mass, were simply covered at the top with great imposts of stones, or with transom stones ; —either lying directly on upright side walls, or on side walls, somewhat inclining towards each other in the upper parts ; but such as could not, in either case, form *any arches*.

And what led *Dean Prideaux*, and other more modern writers, into the mistake of apprehending that there were arches, seems plainly to have been a *preceding* passage in *Diodorus* ; “ that the approach, “ to the garden, was like the approach to a mountain, it having “ structures, and masses piled one upon another ; —so that the appearance was like the rising of the benches of a theatre ; and that, “ *under* the several gradations of ascent were constructed, *σέργηδες*, “ sustaining the whole mass of verdure ; ”—which word *σέργηδες* has been translated *fornices*, or *arches*.

Such translation, however, has surely been adopted, without the

* With regard to the word ὀροφή some preceding remarks have been made, p. 241.

† Diodorus, lib. ii. 70. p. 124. Edit. Wesselingii.

least authority ;*—for the word, if we duly consider its etymology, seems merely to mean,—*caverns* ;—the author obviously only intending to give us to understand, that the whole vast mass, the rather resembled a small mountain, because there was even the resemblance of a sort of *caves* in it, and sustaining it.

There is indeed a passage in *Strabo*, † which might confirm the learned *Prideaux* in his error.—But it is a very curious circumstance, that whilst the full and explanatory account given us by *Diodorus*, guards us against the mistake arising from his own word *σύριγες* ; it will also lead us to apprehend the true meaning, in this passage in *Strabo*, of those difficult words that have in like manner been subject to misinterpretation.

He says, speaking of the hanging gardens,—*they are of a square form*, &c. ;—and adds

Συνέχεται δὲ ψαλιδώμασι καμαρωτοῖς, ἐπὶ πετλῶν ὑψημένοις κυβοειδῶν

Which words have been translated by *Casaubon*,

Fornicibus continentur fornicatis, sitis super talos cubi forman habentes.

They are composed of (or supported by) arched arches, placed (or resting) upon dies (or great masses) of a cubical form.

But at the same time, that it is almost impossible to annex a plain and clear idea to the words, *fornicibus fornicatis*,—*arched arches*,—it is surely full as allowable, more close to the original, and more rational, to translate the words,

They are constructed of camerated, forcep-shaped, open coverings, placed upon cubical dies.‡

* If we refer to the judicious *H. Stephens*, for the elucidation of the word—*σύριγες*—or in the plural *Σύριγες*, (Tom. III. fol. 1137), expecting to find some authority for the rendering of this word an *arch*, or *arches*; to our great astonishment, we find in more than an whole half of one of his vast crowded pages of citations, (crowded so full even on purpose to explain, if possible, this singular word,) not one single extract to give the least authority for rendering it an *arch*:—all that we find, is merely, that it signifies,—*a sinus*,—*a fistula*,—*an empty space*,—or *a cavern*.

† *Strabo*, lib. xvi, 738. Par. Ed. p. 1073. Amst.

‡ *H. Stephens* in his explanation of the word *ψαλῖς*, Tom. IV. p. 697, plainly shews that its true meaning is merely to describe the resemblance of a *forceps*,—or of the sides of a pair of pincers, approaching each other towards the joint ;—and in his explanation of the word *ψαλιδώμας*,—which he translates *fornicatum opus*,—the only instance he produces of its meaning any thing like an *arch*, is this very passage in *Strabo*.

From his explanation of the words—*κομάρα*,—*καμάρωσις*,—and *καμαρωτός*, it also

The description of *Quintus Curtius* will elucidate this matter still further; and shew how *rightly* he understood the accounts of those who had gone before him:—for though, in his time *the arch* was well known, and the word *fornix* had been long introduced to describe it properly;—yet no such word, from first to last, is at all attempted to be used, in the whole of his description:—and this we cannot suppose would have been the case, had he (like *Dean Prideaux*) supposed that *arches* were really made use of in the structure:—his words are,

“ Super arce vulgatum Græcorum fabulis miraculum, pensiles
 “ horti sunt; summam murorum altitudinem æquantes, multarum-
 “ que arborum umbra et proceritate amœni. Saxo pilæ, quæ totum
 “ onus sustinent, instructæ sunt: super pilas lapide quadrato solum
 “ stratum est, patiens terræ, quam altam injiciunt; et humoris, quo
 “ rigant terras: adeoque validas arbores sustinent moles, ut stipites
 “ earum VIII cubitorum spatium crassitudine æquent, in I pedum
 “ altitudinem emineant, et frugiferæ sint, ut si terra sua alerentur.
 “ Et quum vetustas non opera solum manu facta; sed etiam ipsam
 “ naturam paulatim exedendo perimat: hæc moles, quæ tot arbo-
 “ rum radicibus premitur, tantique nemoris pondere onerata est,
 “ inviolata durat. Quippe XX lati parietes sustinent, undecim
 “ pedum intervallo distantes, ut procul visentibus silvæ montibus
 “ suis imminere videantur.*

Still above the tower (of Babylon), and commonly deemed, in Grecian fabulous account, as a miraculous work, are the hanging gardens;—equaling in height the summit of the walls, and rendered delightful by the

seems to appear, that the original meaning simply was merely *testudo*, and *testudinatio*,—a covering inclosing an hollow space;—and that its application to any thing *arched*, was only in consequence of an *arch*, or any *concavity*, forming in reality an *hollow covering*.

* *Quinti Curtii*, lib. v. cap. i. p. 315. *Snakenburgii* Delph. ed.

It is almost impossible to avoid, on citing this passage from *Quintus Curtius*, the remarking a strange error of translation.—*Digby*, in that which he has given us of this curious book, Vol. I. p. 274, octavo, having very sensibly, though not with accurate closeness, translated—*Græcorum fabulis miraculum*—by these words,—*so much celebrated by the Greek poets*,—strangely translates *super arce*,—*on the top of the castle*,—instead of *above the castle*;—saying, *that the hanging gardens were on the top of the castle*;‡—and not considering, that the expression—*super arce*—much more obviously means, merely that they were formed *higher than the castle*.

shade and tallness of many trees.—The square pillars which support the whole weight are built of stone: and upon these square pillars the flooring is formed of squared wrought stone, of strength sufficient to bear the earth thrown deep upon it, and the moisture of the watering of the trees:—and such vast trees do these massy supports sustain, that their roots descending downwards occupy the thickness, (or depth) of no less than eight cubits (12 feet); whilst the trees themselves are not less than 50 feet high; and are as productive of their fruits as if they (grew and) were nourished in their own proper soil (or natural situation); and whereas age, by its duration, oppresses (and brings to decay) not merely works fabricated by hand, but even, by little and little nature itself; this massy structure, which is pressed upon by the roots of so many trees, and is loaded with so vast a grove, remains unhurt;—because twenty broad walls support it, with intervals of 11 feet, so that to those beholding it at a distance, the woods seem to hang over the brows of their own proper mountainous hills.

We cannot then but be convinced, that there were indeed no arches supporting these wonderful *Pensile Gardens*:—neither can we avoid perceiving, at the same time, that they were not by any means of such stupendous magnificence, and excessive beauty, as has been usually supposed;—for if the account of *Diodorus* be true, and his measures just, and if they took up only a space of four *Plethra*,* (or of about 400 feet square, as *Prideaux* computes;) they did not cover a space of ground so large as that of *Lincoln's Inn Fields* within the rails; nor by any means so large as that occupied by the base of the great *Pyramid of Egypt*.

Whatever space they covered, it is surely most clear, from the

* If we conclude, as we may fairly do, from the whole of the preceding account, that the square pillars of these walls, or the *cubical dies*, mentioned by *Strabo*, were about 10 feet in thickness, and their intercolumnations 11 feet; then twenty rows of such pillars, and nineteen intervals, will amount to 409 feet, which (allowing for the difference of Roman and English feet,) will very nearly agree with the conclusion of *Dean Prideaux*, Vol. I. p. 145, that the hanging garden of *Babylon* was about 400 feet square;—and if we suppose the pillars 10 feet 3 inches square, will exactly agree with that conclusion.—But who, in the present days, and in a country of hill and dale, can possibly, notwithstanding the astonishing expence of the work, hold in any great estimation, such a mere glance, over the walls of a city into a flat marshy country?

facts adduced; that neither in the fabric of these *gardens*, nor in the temple of *Belus*, nor in the *walls*, nor in the *bridge* of *Babylon*, were there any *arches*.

And as there were no arches at *Babylon*, so again in the magnificent remains of *Persepolis*, in *Persia*, there is nothing in any part, that can at all lead us either to believe, or even to suspect, that any *Arch* did ever exist, in that vast pile.

These remains of *Persepolis* are about 30 miles distance from *Schiras* in *Persia*;* and whether either *Chardin*, or *le Bruyn* be right in their conjectures, or whether these stupendous ruins did, or did not once constitute a part of the magnificent palace of *Darius*, that was destroyed by *Alexander the Great*, there cannot remain a doubt of their having formed the most solid supports of an edifice, that was constructed in the times of the earliest, and most powerful Princes of the country.

The dresses of the figures sculptured on the walls, so perfectly corresponding with the descriptions of the *old Median*, and *Persian robes*, that have been given to us by the first Greek writers;—the inscriptions in plain clear characters, but still in such as have been found, unintelligible, not only to the modern Persians, but to the *Persees* themselves, or those now skilled in what is at present deemed their antient language;—and the correspondence of these buildings with those most antient ones at *Thebes* in *Egypt*, in the circumstance of having such a vast number of figures cut upon the stones of the walls;—all these facts plainly demonstrate the high antiquity of the structure, and its vast importance; and that it had every degree of ornament, and glory, that the times in which it was erected were capable of yielding.

Yet the more we examine the curious engravings that have been given to the world of these remains; and all the full descriptions of them;† the more we shall be convinced that there never was *any Arch* seen here.

* Sir T. Herbet.—Harris, Vol. I. p. 429.

† The first account of these remains, in modern times, seems to have been that very short one given by *Geoffrey Duckel*, a servant of the Russian company, about the year 1574, on his return from a voyage to *Persia*; who merely spoke of two gates of the city as then existing, and of a few *pinnacles* in the mountains;—by which latter expression were obviously

The magnificent columns, and pillars, are all at distances manifestly designed for some of them to form large, and others small porticos;—and to support either imposts of stone in the Egyptian manner; or beams of timber, like those described to have been in the Houses, and in the Temple of *Solomon*; and in the Palace of *Priam*.

meant, what we now know to have been *pillars* of the antient palace. See Harris's Collection of Voyages, Vol. I. p. 526; and Hakluyt's Voyages, Vol. I. p. 396.

The second account is that of *Sir Thomas Herbert*, about 1627; accompanied by a very small and inaccurate drawing, in Harris's Collection, Vol. I. p. 429, Pl. III. fig. 12; from which, however, we not only learn that these *pinnacles* were really *pillars*; but also have a very tolerable idea given us, of the *vastness* of the buildings; and of the *courts*; some of which however he took for *single rooms*:—and we have besides a circumstance mentioned by him, not sufficiently adverted to by others; which is, that some of the sculptured figures on the walls, were also *painted*, (as we know, from Norden, those in Egypt were): and that the gilding, both on the cornishes of the structure, and on the verge of the vests of the figures, remained quite fresh in his time: an observation very similar to that made by Norden, in Egypt.

Herbert talks indeed of *an arch*; but in explaining himself fully, clearly shews that he meant only an *excavation* hewn out of a rock.

The third account was that by *Mandelsloe*, about 1638, (see Harris's Collection, Vol. II. p. 115), which though indeed not full, nor clear, seems, as far as it goes, to be faithful and true; and mentions the former existence of many more pillars, than then remained.

The fourth was by *Struys*, in that narration of his voyages, which may most justly be called, (as it has been), the *Book of Lies*: he says he visited *Tzilminar*, or *Persepolis*, in 1672;—gives a short account which seems in the principal part to have been copied from *Mandelsloe's*;—and annexes a plate, p. 333, very neatly engraved, of a building totally inconsistent with his own account; and which, on the first cast of the eye, any one may perceive neither ever did, or could exist in any part of the world, any more than the *domes* existed at *Persepolis*, with which he has, in his plate, adorned its roof.

Afterwards came the very full and curious account given by *Sir John Chardin*, in consequence of his visit in 1674. See Tom. II. p. 140 to 197, in the edition of 1755; and from p. 98, to 126, Tom. III. of the edition of 1711.

And last of all, came that of *Le Bruyn*, in his voyages, Tom II. p. 285, to 344.

From these materials there were *two* large, but very indifferent plates, given as copies from *Le Bruyn*, in the folio edition of the Universal History, Vol. III. p. 53, engraved by *Blundell*.

And in 1739, a very good set was published by *Harding*, entitled *Persepolis Illustrated*, which were afterwards exactly imitated in a set annexed to the octavo edition of the Universal History, printed in 1747, Vol. V. p. 96, &c.

There is a very imperfect, and incorrect account of these ruins, by *Thevenot*; and one much more imperfect by *Tavernier*.

And indeed one would rather believe the coverings, and superstructures were here of timber; both because the palace of Persepolis (if this really was that palace) is described as being principally constructed of wood, and having particularly a great deal of cedar, and as being so soon destroyed by fire;*—and also because the distance, or inter-columnation of so many of the pillars, (they being about 22 feet from each other) is so well adapted, to support such a kind of edifice.

The whole appearance of the remains, seems to indicate a building that consisted originally of magnificent open porticos; and of square courts, one beyond another, surrounded with buildings, containing *very small apartments*.

Chardin+ expressly tells us, most of the side rooms, or chambers, were not more than 8 feet wide.

But the courts we find were entered by very lofty portals:—opposite to some one of which, in *an Inner Court*, was probably the Regal Throne;‡ situated in a manner just similar to that on which *Ahasuerus* is described as being sitting, in another great Persian palace, at *Shusham*, or *Susa*, when *Esther* with so much timidity approached the Royal Presence.

The exact account given us is,—*that in the inner court, the king*

* Diodorus Siculus, lib. xvii. cap. 71. Editio Wesselingii, p. 600. Arrian Exped. Alex. lib. iii. cap. 18. Quintus Curtius, lib. v. cap. 7.

+ Voyage de Chardin, Tom. II. p. 154. Edit. 1755.

‡ It deserves peculiar notice, that in the views of Persepolis, there is actually within one of the *inner courts*, the most remote from the outward great portal of entrance, the appearance of an *advanced portal*; standing before another portal, in the very inside of the court, and placed at the furthest end, opposite to the entrance of that court, just as if it were designed to mark some most distinguished, and dignified spot.—In this, probably was such a throne for the King.

See Chardin's representations, Tom. II. Tab. LIII.

Harding's, Pl. II.

Universal History, edit. 1747, Vol. V. Pl. II.

And I cannot help remarking, on this occasion, that notwithstanding all the censures passed by *le Bruyn*, *Chardin's* plates, (however ill drawn, or executed,) do yet convey much more intelligible information than *le Bruyn's*; and ideas that may be more easily comprehended. The efforts of *le Bruyn* to introduce finer shading, and more of the effect of painting, has in many instances produced a very considerable degree of indistinctness, and confusion.

sat upon his royal throne, in the royal house, over against the gate of the house; §—and that Esther having passed through all the doors, (or portals) stood before the King, who sat upon his Royal Throne, and was clothed with all his robes of majesty, all glittering with gold and precious stones, and he was very dreadful.

And it deserves further to be remarked, that the various courts still so plainly to be distinguished, at *Persepolis*, do also very much correspond with the account of those mentioned as existing at *Susa*, when *Ahasuerus* is described as giving a royal feast, in another of the courts of the house,* upon a pavement of red, blue, and white, and black marble; where were white, green, and blue hangings, fastened with cords of fine linen and purple, to silver rings, and pillars of marble.

No where, amongst the ruins of *Persepolis*, can one discern the

§ See Esther, chap. iv. ver. 11. chap. v. ver. 1. chap. xv. ver. 6. This whole account of the palace at *Susa*, together with the whole appearance of the remains at *Persepolis*, confirms the remark that has been already made (p. 200.) concerning the mode of building round square courts having been originally derived from *Persia*, and communicated afterwards, by the *Greeks*, to the *Romans*, about the time of *Lucullus*, and *Julius Cæsar*.

Ahasuerus is justly concluded by *Dean Prideaux* (in his *Connection*, Vol. I. p. 561) to have been *Artaxerxes Longimanus*, the third son of *Xerxes*.—And with respect to the most elegant, and highest improvements of their architecture, the age of *Xerxes*, and *Artaxerxes*, seems to have been to the *Persians*, much what the age of *Trajan*, *Adrian*, and the *Antonines* was to the *Romans*;—the æra of its greatest perfection.—To which we may add, that the bass-reliefs, on the walls, and pilasters of *Persepolis*, serve still to convey down to us, the modes of dress, and of the armour, and appearance of the *Persians*, as precisely, and effectually, as the bass-reliefs on the columns of *Trajan*, and *Antoninus*, do those of the *Romans*.

The dress of the Persian monarch;—his long golden sceptre, or staff;—(according to Eastern ideas, his rod of command;—so particularly noticed in the Book of Esther, chap. iv. ver. 11. chap. v. ver. 2,)—appears over and over again in these bass-reliefs, and cannot be mistaken, any more than the peculiar form of his throne.

The dresses, and the accoutrements of the *Satrapes*, and of the different troops of soldiers under them, is also as clearly to be distinguished, by any discerning eye.

I have ventured in the former Volume to remark, that the wolves' heads, and the dogs' heads, seen on the bodies of men in the Egyptian bass-reliefs, were merely terrific helmets worn by the soldiers:—and indeed, from the bass-reliefs at *Thebes*,—at *Persepolis*,—and on *Trajan's Pillar*,—the whole military appearance of *Egyptians*, *Persians*, and *Romans*, may be brought to light;—the paucity of whose armour, after all, is hardly less surprising, than the greatness of the mischief they effected with it.

* Esther, chap. i. ver. 5, 6.

springing of *an arch*.*—nor is there so much as an *arched door way*;—or an *arched portal*;—or an *arched window* in the whole structure;—nor even an *arched niche*; which surely there would have been, in some part or other, if there had ever been *any arches* in the building at all; as so many door-ways,—portals,—windows,—and niches,—do actually still remain entire:—but they are all, whether of large, or of inferior dimensions, covered flat at the top, by imposts, and architraves, or transom stones: or else are only hewn out of one single stone, and still either of a square, or of an oblong form.†

The only representation, in all the drawings brought into Europe, that could lead to the idea of the existence of *an arch* at Persepolis; is that by le Bruyn,‡ of *a part of the side of a window, filled with*

* This is confirmed in express words by Chardin, Tom. II. p. 161. Ed. 1735.

† See le Bruyn's representation, Tom. IV. p. 335. Tab. 4.

And Harding's, Pl. X.

And the Universal History, Vol. V. Ed. 1747. Pl. X.

It is in the representation of this part of the architecture more particularly, that the merit of *le Bruyn's* representations seems to consist:—for in that of the carved bass-relief figures, surely we may discern there is more *naïveté* in those of Chardin, whether any drawing of his were precisely a *fac-simile* or not.

‡ See *Voyages de le Bruyn*, quarto, Tom. IV. p. 337, Tab. 4.—It is also copied in the Plates published by Harding, Pl. IX.; and in those inserted in the octavo edition of the Universal History, Vol. V. p. 97, Pl. IX.

And on this occasion I cannot but again observe, with regard to the several views and representations which have been published of *Persepolis*; that after all, those of *Chardin*, which were *the first*, seem still to be really the most instructive, notwithstanding the censures of *le Bruyn*.—They certainly do also, more than any others, serve to convey the clearest idea of the exact manner in which those colossal figures called the sphinxes, consistently with all the accounts, are carved upon the pilasters of the portico. For those figures seem manifestly to have been (like several Egyptian sculptures) only *in very low relief*, scarcely more than engraving; the sides of the bodies of the animals being represented flatly on the side walls, and the fronts of the heads represented almost as flatly on the end walls, as if all the rest of the bodies of the animals were entirely buried *within* the substance of the walls; and supporting them:—and therefore, most obviously, however *Chardin's* drawings may be remote from giving very exact *portraits* of these obscure figures, (the flatness of whose strange fronts in such low relief, perhaps renders it almost impossible for them to have been portrayed with any true resemblance of nature at all,) nothing we may be assured can be more unlike the truth, than those figures of *le Bruyn's*, which appear both projecting improperly in much more than *alto-relievo*; and also as having the appearance, most ludicrously, of a

characters.—But this, on a careful examination of the account, appears to be so far from being intended to exhibit any representation of *an arch*; that indeed it was manifestly designed, merely to represent a solid block of stone, with its corners at the top rounded, or broken off:—and was so represented, solely for the sake of shewing, as it was thought the more plainly, that it was merely a block of stone, and only *a piece of the side* of a window; and not a representation of the window itself.

As there appears no arch in the remains of the *Palace*; so neither in the *Tombs*, in the mountain near adjoining, nor in those, at a little further distance, at the place called *Naxi Rustan*, is there any such appearance. For they have all, without exception, their grand *false portals* formed *square* at the top, with flat lintels;—and the pillars in front of the whole, (though merely hewn out of the face of the solid rock,) are purposely made to have the representation of supporting great projecting impost, with a long architrave, and frieze above, adorned with sculptured figures.

And as to what, seems, at first sight, (in one of those views, published with copies of Chardin's and le Bruyn's plates,* by Harding) to have the resemblance of *arches*, in the inside of one of the tombs; they plainly appear to be *mere excavations* cut out of the solid rock, whilst indeed we are expressly told by Chardin, who examined the place, that they are such.

Chardin's account of the inside of the other sepulchre, which he also visited,† is, that two marble coffins, or tombs, stood on the floor

sort of full bottomed wigs, especially in the copies in the folio edition of the Universal History, Vol. III. p. 33.

See Chardin's Representations, Tom. II. Ed. 1735. Tab. 52, 53, 56, 57; and

Le Bruyn's Representations, Tom. IV. Tab. 4. p. 330, 331; and

Harding's Representations, Pl. III. and Pl. X.

And those in the Universal History, Vol. V. octavo. Ed. 1747, p. 96. Pl. I. III. IV.

* This representation of the vault with small side vaults, in fact seems to have no sort of authority. It is not found in *le Bruyn's* quarto edition.—And indeed he there tells us plainly, Tom. IV. p. 366, that he himself, never was in the inside of the tombs at all.

† Voyages du Chardin, Tom II. p. 163. Ed 1735. But it ought further to be remarked, that le Bruyn gives a representation (Tab. 4. Tom. IV. p. 362) of two little edifices, in

of rock ; *in a small cave hewn out of the substance of the rock*, at equal distances from each other, and from the sides of the cave.

The principal front of the palace at *Persepolis*, seems to have been towards the north ; and to have consisted of a grand open portico ; originally supported by four pillars ;—two of which still remain nearly entire, whilst the two others are almost utterly destroyed, except just at their foundations. At the two ends of this portico, were the two open portals, one on each side ; in which are so oddly carved the figures of the Sphinxes :—and near the first of these, the most remote from the mountain, and looking towards the plain, was that grand staircase that faces the west.

From this superb portal, the whole building seems to have been continued in length, towards the south ; and to have consisted of a succession of square courts ; on the sides of which still remain the stone door-ways, and façades of small apartments, that had been in other respects chiefly constructed of timber.

A great part of the walls, we find, were covered with figures, in a sort of bass-relief ; very nearly resembling the manner in which *Norden* informs us the walls of the temples and great buildings at *Thebes* in Egypt are covered.

The pillars, also, as was the case with several in Egypt, are remarkable for the fantastic forms of the capitals ; and the covering above, was plainly constructed, as in Egypt, of great imposts of stones, supporting other flat transom stones, or a sort of regular architraves, in some parts ; and in others, obviously designed to support only beams of timber.

All these circumstances, of concurrence with the ornaments, and architecture in Egypt, serve greatly to confirm the idea,† that *Persepolis* was built originally, soon after the time of *Cambyses*, out of the spoils brought by him from *Egypt*, and even by the assistance of artists transported from thence.

The same fact also seems to be confirmed by the mode of construction of the adjacent plain ; which really have an arch on each side of each structure.—These however are obviously mere recent Mahometan buildings ; of a much later date, by very many centuries, and erected even within these last five or six hundred years.

* See Chardin Tom. II. Tab 52, 53. Le Bruyn, Tom. IV. Tab. 4. p. 328, 330. Harding, Pl. I. Pl. II. Universal History, Vol. V. Ed. 1747. p. 96, Pl. 1, and 2.

† See Voyages de le Bruyn, Vol. IV. p. 403, quarto.

structing the *tombs*, for though indeed they are of a very different form, from the *Pyramids*, yet we find here, at the entrance of every one of them, (as there is at the entrance of the great Pyramid of Gize) a *false portal*;—most magnificent in its dimensions;—but with only a very small, low, *forced entrance*, at bottom, about 2½ feet high; whilst all the rest is a mere facing to solid rock.*

If all these circumstances, and the testimony of *Diodorus*, amount to proofs, that *Persepolis* was built by *Egyptian artists*, and soon after the return of the army of *Cambyzes*; it must probably, though finished by *Artaxerxes*, have been begun by *Darius the son of Hystaspes*, much about the time of the rebuilding of the *Second Temple at Jerusalem*;—and, in that case, as the sepulchres of which we have spoken, (notwithstanding the original burial-place of the *Medo-Persians* having been at *Ecbatana*,) are allowed to have been the most usual burial-places of the Persian monarchs, from the time in which *Persepolis* was built, down to the time of its being burnt by *Alexander the Great*; in some one of these, most probably, was interred the celebrated *Queen Esther*; whether she was the *Queen of Darius Hystaspes*, or of *Xerxes*, as some have imagined; or (as *Deau Prideaux* seems more justly to conclude) of *Artaxerxes Longimanus*: for in all those reigns this palace must have been in its utmost splendour, and the most resorted to, of almost any.

Further; it may be added, that if *Persepolis* was indeed built by *Darius Hystaspes*; then we may the better understand the meaning of the figures engraven on the rock at *Naxi Rustan*,† (or *Nachs-Rustem*) of two great personages sitting on horseback, and holding firmly together, by a great ring in their hands;—and may perhaps most fairly conclude, that this bass-relief does rather represent that remarkable circumstance mentioned by *Herodotus*,‡ of the two competitors for the Crown, waiting to discover whose horse should neigh first after the rising of the sun, (by means of which event, in his

* Chardin, Tom. III. p. 115. Ed. 1711.

† Voyages du Chardin, Tom. III. p. 122. Pl. LXXIV. Voyages de le Bruyn, Tom. IV. p. 362, quarto. Harding's Plates, Pl. XI. Universal History, octavo, Vol. V. Ed. 1747, Pl. XXIV. XXV, XXVI.

‡ Herodotus lib. iii. 85, 86, 87. p. 241, 242. Ed. Wesselingii.

favour, *Darius* obtained the throne) than any combat, or supposed contest merely of strength.

And if so, then one of the other compartments, on the same rock, may justly be deemed to represent *the acknowledgement of his dominion*, by the Persian nobles, after the event of *the neighing of the horse* had taken place;—and a third compartment, to represent *the submission of the inferior chieftains*.

If *Persepolis* was first begun to be built by *Darius Hystaspes* (as we have the utmost reason to believe) then, also, we may, from this circumstance, account for the pillars having *bases*; as this was in consequence of its being built in so much *later times* than the structures in Egypt: only about five hundred years before the Christian æra.

No sort of appearance of *an arch* is to be found in the remains of the temples at *Pæstum*, in Italy; nor indeed could any such sort of appearance be *there* reasonably expected; as the total want of any *bases* to the pillars plainly points out its earlier period of architecture.

In the surrounding walls indeed, of this antient city, there is found a gate, with a *regular arch*, and a regular *key-stone*, adorned with the figure of a *syren* carved upon it*. But as it is well known that *Pæstum* was in full splendour, even so late as in the *Augustan age*, (when *Virgil*, *Ovid*, *Propertius*, and *Martial*, all celebrated its fame, and *its roses*,) we have the utmost reason to believe, that *this fine arch*, was only of *that age*† and very long subsequent, in the date of its erection, to the age in which the temples at *Pæstum* were built.

They were probably reared a little *before* the building of the palace of *Persepolis*, and more than five hundred and twenty years § before the Christian æra. And being therefore so far prior, in point of time, to *Persepolis*, the pillars have *no bases*, but are, like the most antient ones in Egypt, found to have the shafts themselves merely standing upon, and as it were rising out of the floor.

* See Major's Ruins of Pæstum, p. 17, 21. Tab. III. IV. V.

† This will also appear the more probable, if we consider, that there is at *Brundisium*, a capital of a pillar, actually erected by *Augustus*; with ornaments representing *Syrens* and *Tritons*. It has had a drawing made of it, by the ingenious Mr. Reveley the architect.

§ Major's Pæstum, p. 11.

These pillars, it has also been observed, are strangely disproportioned; like many of the most antient pillars in Egypt; being not more than 4, or $4\frac{1}{2}$ diameters high; whereas the proportion of the *Doric* order properly, is now esteemed to be eight.

Their capitals also, though called *Doric*, are of a most singular form; resembling a compressed bag, more than any thing else;—instead of being like the true *Tuscan*, or *Doric* capital, rising to an edge at the top.*—Their *flutings* also are remarkable, being quite to an edge

And in all these really antient buildings, at *Pestum*, there is no appearance of an *arch*, or of any the least provision for the springing of an *arch*.

Again;—amongst the celebrated ruins of *Athens*;—neither in the remains of those buildings which were erected, in the *Acropolis*, in the time of *Pericles*;—nor indeed in any of those that appear to have been erected, in other parts of the city, at all prior to the time of *Augustus*, is there to be found any indication of an *arch*.

Those arches seen in the external wall of the Theatre, may fairly be concluded to have been of the time of the Emperor *Adrian*; as he is known to have rebuilt it. † And the same may be observed

* All this is finely represented in some very curious drawings, by Mr. *Reveley* the architect, on a very large scale; which it is to be hoped will be published some time or other; and therefore I do not think myself at liberty to give any representations of them; nor to add any thing further than a description of the form of these capitals; with due mention of his most curious, and accurate investigation: observing, at the same time, that the peculiarity of their form has hardly been sufficiently attended to in *Major's* engravings in general; although some idea of it is conveyed in the representations in detail, in Tab. XXIII. of that Work.

Capitals of the same sort of construction, are found on the pillars of an antient temple at *Corinth*, (see *Le Roy's* Ruins of Greece, Pl. XXV.)

And with regard to the disproportion of antient columns, it appears, that those of the Temple of *Theseus*, built in the time of *Pericles*, after the battle of Marathon, have, according to Mr. *Reveley's* exact measures, not more than six diameters in height, and some have even less.

† See *le Roy's* Ruines des Monuments de la Grece, p. 13, Pl. VII. And the account of Athens by *Chandler*, in his Travels in Greece.

Adrian's attachment to *Athens* is well known. On passing through the city with *Trajan*, he was created *Archon*, or chief magistrate. After his return from *Britain*, when, as emperor he visited all the provinces, he was again there. And afterwards he actually assumed the habit

concerning the arches, in the wall, *added* to the Temple of Jupiter Olympius.+

The monument of *Philopappus*; which has many regular arches; was decidedly of the time of the emperor *Trajan*.‡

And the fine arch of *Theseus*, was of the time of *Adrian*.§

Whilst nearly all the buildings, in that city of arts, and of science, except those whose dates can be positively ascertained to have been of the *Augustan age*, or subsequent to it, are found, (like the most antient ones in the *Acropolis*) totally devoid of *arches*, and to have had ponderous architraves, and entablatures, supported by pillars that are even of irregular proportions, according to those ideas which prevailed in the best ages; and are often without any *bases*;—as particularly in the Temple of *Minerva*, and in that of *Theseus*.||

The celebrated temple of *Diana at Ephesus*, built after the days of Alexander the Great, seems evidently to have had *no arch*, in any part of the structure, any more than that which was reared before, in the days of Cræsus, and Solon.—For the exact account given us by *Pliny*, of the mode of forming a sufficiently solid foundation for it, in a marshy soil; by means of laying beds of pounded charcoal upon the marshy ground, with alternate layers of fleeces of wool, to render the whole mass compact; and the well-known fact, that over this was placed *a most solid basement* for the whole building to rest upon, ascended by ten steps, precludes almost entirely the idea of *any arches*, or vaultings of any kind underneath;—whilst the particular account of vast architraves, and of the immense stone *lintel* placed over the great portal of entrance, most positively precludes the possibility of supposing that any arch ever existed in that great gate of entrance, or any where in the upper part of the building.

The words of *Pliny* are,

of *Archon*;—celebrated the festival of *Bacchus*, (to whom this very theatre was dedicated), and embellished the city with so many stately structures, that he was called *the Second Founder*. See *Noris Epist. Consul.* p. 72. *Eusebii Chron.* p. 211. *Dio*, p. 795. *Hier. Chron.* *Wheler's Travels*, p. 437.

+ *Le Roy*, p. 19, Pl. X. ‡ *Ibid.* p. 33, Pl. XX. § *Ibid.* p. 34, Pl. XXI.

|| See *Pococke's Travels*, Vol. II. part 2d. Pl. LXVII. p. 162. Pl. LXXIX. p. 169. Pl. LXXVII. p. 168. Pl. LXXVI. p. 161.

Magnificentiæ vera admiratio extat templum Ephesiæ Dianæ ducentis viginti annis factum a tota Asia. In solo id palustri fecere, ne terræ motus sentiret, aut hiatus timeret. Rursus ne in lubrico atque instabili fundamenta tantæ molis locarentur, calcatis ea substravere carbonibus, dein velleribus lanæ. Univerſo templo longitudine est ccccxv pedum, latitudo ducentorum viginti, columnarum centum viginti,* septem a singulis regibus factæ, lx pedum altitudine: ex iis xxxvi cælata, una a Scopæ. Operi præfuit Chersiphron architectus. Summa miracula, epistylia tantæ molis attolli potuisse. Id consecutus est ille æronibus arena plenis, molli clivo super capita columnarum exaggerato, paulatim exinaniens imos, ut sensim opus in cubili sederet. Difficillime hoc contigit in limine ipso quod foribus imponebat. Etenim ea maxima moles fuit: nec sedit in cubili, anxio artifice, mortis destinatione suprema. Traduntque in ea cogitatione fessum nocturno tempore in quiete vidisse præsentem Deam, cui templum fiebat, hortantem ut viveret: se composuisse lapidem, atque ita postero die apparuit, et pondere ipso correctus videbatur. Plin. Nat. Hist. lib. xxxvi. cap. 14.

Just is the admiration of the magnificence that the Temple of the Ephesian Diana excites,—which was two hundred and twenty years in building, at the expence of all Asia (Minor).—In a marshy soil they placed it; that it might not be affected by earthquakes, or subject to any rendings (or cracks).—And further, that they might not lay the foundations of such a vast pile upon a yielding, unstable bottom; they formed a stratum of pounded charcoal covered with fleeces of wool.—The length of the whole Temple was 425 feet,—the breadth 220,—the columns 120,—seven made at the expence of individual Kings;—the height of them 60 feet;—and 36 of them sculptured,—one by Scopas.†—Chersiphron

* I have adopted Mr. Windham's excellent correction of the punctuation, by placing a comma here;—a correction which surely flings great light upon the passage.—See Archæologia, Vol. VI. p. 68.

† Without presuming to decide whether *Salmasius's* emendation of the words—*una a Scopæ*,—*one by Scopas*,—by reading,—*uno a Scopæ*,—*by Scopas only*,—be right or not, I cannot but venture to conclude, that these thirty-six columns were adorned with *bass-reliefs*, and other spiral ornaments besides fluting; and are therefore thus distinguished by Pliny. The word *cælatus* implies *engraving*, or *embossing*, and something much more than mere fluting;—and it is well known, that the pillars of Trajan, and of Antoninus, and the historical column that *Sauvys* (p. 35,) describes as being formerly at Constantinople, which

the architect presided over the work.—It was most miraculous, that architraves of such immense bulk could be raised up to their places.—This he accomplished, by means of bags full of sand, piled up, forming a gentle ascent rising higher than the capitals of the columns, and then by gradually emptying the lower ones, in order that the work in hand, the ponderous mass, might slowly, by little and little settle on its proper support.—This was brought to pass with the utmost difficulty with regard to the very lintel which he was placing upon the portal.—For its bulk was the most prodigious:—and it did not settle properly, on its support, or bed; in consequence of which the architect, full of anxiety, was ready to doom himself to death.—Tradition says that, wearying himself out with such thoughts in the night, he saw in his sleep the goddess, whose temple he was building, appearing to him, and exhorting him to live, for that she had set the stone right;—and so it appeared the next day, seeming to have been brought to its correct position by its own weight.

Hence therefore it appears, that in this wondrous pile, even when finished after the days of Alexander, and as remaining till Pliny's time, there was *no arch*:—and we may rest well assured that in the prior one, built in the days of Croesus, and Solon, above two-hundred years before Alexander, there could be none.

Perhaps also it ought to be mentioned, that in the medals representing the shrine of Diana,* no attempt is made, that I am aware of, to represent any arch, in the Temple in which it stands.

were reared in subsequent ages, were adorned with embossed figures surrounding the whole as on a spiral fillet, or band;—whilst some of those even of earlier ages appear to have been adorned with other ornaments besides fluting; as may be seen amongst the specimens described both by Pococke, and Norden.

* The shrine, as it appears upon the medals, was a sort of *Terminus*;—and historians have described it as being of wood; which some have supposed cedar, others ebony, and others the *vine-tree*, overlaid with gold:—(Plin. Nat. Hist. lib. xvi. cap. 40, sec. 79.) The image is said by Pliny to have been never changed, though the temple was seven times rebuilt. But, from a variety of facts, mentioned by antient writers of the greatest credit, I have ventured, in a former work, to conclude the *image itself*, that was the object of the Ephesians, idolatry, to have been merely a *pyramidal, pyritical stone*.—And if we consider that a *shrine* properly means a *case* inclosing somewhat; we may perhaps most justly conclude, that such pyramidal stone, said to have fallen from heaven, was really *incased*, or *inshrined*, in that lower part of the wooden image which resembled a *tem*, or inverted quadrangular pyramid. This conclusion may reconcile all the accounts; and seems to receive additional confirmation, from the appearances of the *shrine*, on medals in the Pembroke Collection,

Pococke* indeed, and Van Egmont, † speak of *arches* under what they conceived to be remains of the temple :—but it appears clearly, from Chandler's‡ more accurate observations, that they were entirely mistaken in what they took to have been its situation ;—and that the very vestiges of this great object of heathen idolatry were so utterly razed by the zeal of succeeding ages, that none are, at present, to be found.

And as to those actual remains of huildings at *Ephesus*, where arches do really still exist, it is obvious, from a variety of circumstances, that they were either of the age of *Augustus*, § or of *Trajan*, or *Adrian*, or even of the time of the *Greek Emperors* ; as has been justly remarked by Pococke, || with regard to some of them.—Whilst there are even inscriptions still legible on the arches of the acqueduct, and elsewhere, specifying the reigns of *Trajan*, *Adrian*, and *Antoninus*. ¶

represented in Part II. Tab. 3, 7, 61. Part III. Tab. 46, 75, 114. Whilst we ought not to forget, that the—*ναὸς ἀργυρεῖς*—the *silver shrines* made by *Demetrius*, mentioned in the *Acts* chap. xix. ver. 24, are most justly concluded to have been *silver medals*, with similar representations of the *shrine*;—and that from some of these, most probably those on the *Pembroke medals* were taken.—Neither perhaps ought we to forget, that there is a peculiarity in an expression in *Jeremiah*, chap. iii. ver. 9.—*τὸ ξύλον καὶ τὸν λίθον*, the *stock and the stone* which may very well be thought to intimate, that, in other instances also, the object of idolatrous worship and abomination, was thus combined both of wood and stone.

The grounds for concluding the real image to have been merely a *pyramidal stone*, may be seen in a little tract, entitled, *Remarks concerning stones said to have fallen from the clouds*, (p. 15.)—And to what has been there said I cannot but now add, that even the *Palladium of Rome*, seems to have been of the very same kind ;—since we find that it, in like manner, was by tradition, reported to have *fallen from heaven*; and that its weight was not so great, but that the *vestal virgins* could catch it up, and carry it, when the *Temple of Vesta* was on fire, in the time of *Commodus*, from its secret cell, to the palace of the Emperor.—See *Herodian*, lib. i. cap. 33, and 45.

The fact of such sort of stones really falling from the clouds, has been still more fully confirmed, since my little tract was written, by well attested accounts within this year or two, of others that have lately fallen in *India*, and particularly near *Benares*: some of which have been brought over, and compared with those which fell in *Italy*, and elsewhere; and have been found exactly of the same kind of substance.

* Pococke, Vol. II. Part ii. p. 51.

† Van Egmont's Travels Vol. I. p. 107.

‡ See Chandler's Travels in Asia Minor, p. 133, 139, 140, 141; and also Mr. Falconer's very judicious Observations, in the *Archæologia*, Vol. XI. p. 15, 16.

§ Chandler, p. 124.

|| Pococke, Vol. II. Part ii. p. 47.

¶ Van Egmont, Vol. I. p. 115, 116.

It ought not to be passed by unnoticed, that we have in the preceding account of *Pliny's*, a positive confirmation of the idea suggested in the former Volume,* concerning the mode of raising immensely ponderous stones to great heights, *by means of artificial sloping mounts of earth*:—and have even information of a great improvement of this mode, by using sand; which might easily be removed gradually from the bottom of the mount, to lower a little the ponderous weight at the top, when once it had been rolled up the gradual slope; and by that means to fix it in its proper situation.—And perhaps it may be added, that the *invention of the arch*, was the sole cause of this simple and ingenious method being so much forgotten.

I may now then venture to add, that after the best research which can well be made with respect to various parts of the world, and after all the means of investigation, that are in our power, have been tried; there does not appear, as far as my inquiries have enabled me to apprehend, in any country, (no not even in *Italy*, or *Rome* itself) *one arch* to have existed, *much prior* to the time of *Augustus*.

The first positive intimation we have concerning the building of *arches*, seems to have been, by *Livy*,† who tells us, that *Scipio Africanus*, and *L. Mummius*, placed *arches* on piers, which *M. Fulvius* had constructed to form a bridge over the *Tyber*, many years before;—and this work of *Scipio's*, which appears to have been a sort of first splendid introduction of a *new invention*, could not possibly have been executed more than an hundred years, at most, before *Augustus Cæsar* obtained the empire.

Cicero speaks of an arch erected by *Verres*, or in honour of him, at *Syracuse*;‡ and so early an existence of such a kind of structure *there*, before we hear of one any where else, may perhaps even fairly lead us to suspect,—that *Sicily* was the country, where this noble kind of ornament in architecture first appeared,—and that indeed *ARCHIMEDES* was the inventor of it.

* Vol. I. p. 260.

† Lib. xl. cap. 51. *M. Fulvius* plura et majoris locavit usus. Portum, et pilas pontis in *Tiberim*; quibus pilis fornices post aliquot annos *P. Scipio Africanus*, et *L. Mummius Censores* locaverunt imponendos.

‡ In *Verrem*, lib. ii. sec. 63.—Hujus fornix in foro *Syraculis* est, in quo nudus filius stat: ipse autem ex equo nudatam ab se provinciam prospicit.

Hirtius, tells us of arches at *Alexandria*;²—and *Livy* speaks of a street called the *arched-way* in Rome.†—And *Virgil* has a plain reference to *arches*, both in his ideal descriptions;‡ and in one of his similes.§—But all *the arches* which gave occasion to any of *these* expressions, made use of by these authors, may very fairly be concluded to have been constructed *after* the time of *Archimedes*.

And as to the celebrated *Sewers of Rome*, which have been so often spoken of as being constructed by *Tarquinius Superbus*:—from the very account which *Dionysius Halicarnassus*, *Strabo*, and *Pliny*, give of them, as it stands in their own words,|| we may reasonably conclude, that the real work of *Tarquin* was, in some parts, mere excavation of rock;—and in others, (where any thing like vaulting was needful,) formed of strong side walls, covered originally somewhat in the manner of the vaulting under the hanging gardens at *Babylon*; or else merely with timber:—and that the whole was, after many ages, in the time of *Augustus* only, arched over by *Agrippa*.—

We find indeed, on the most classic ground, the celebrated bridge or *aqueduct of Narni*; spoken of by *Addison*, as one of the stateliest ruins in Italy;—and which consisted of three or four *great arches* of marble, whose vast blocks were apparently without cement; ¶ whilst one of the arches is said to be about 170 feet in diameter;—but this aqueduct, or bridge, was built in the time of *Augustus Cæsar*.

* A. Hirtii de Bello Alexandrino, sec. 1.—Incendio ferè tuta est Alexandria: quod sine contignatione ac materia sunt ædificia, et structuris atque fornibus continenter; tectaque sunt rudere aut pavimentis.

† Lib. xxii. sec. 36. Et in via Fornicata, quæ ad Campum erat, aliquot homines de celo tacti exanimatique fuerant.

‡ Mœnia conspicio, atque adverso fornice portas. *Æneidos*, lib. vi. l. 651.

§ Omnis et agricola, et tuta latet arce viator

Aut amnis ripis, aut alti fornice saxi. *Ibid.* lib. x. l. 806.

|| Ἡρξαστο δὲ καὶ τοὺς ὑπὸνέμους ἀρύσειν, *Dionys. Halic.* lib. iii. p. 200.

Οἱ δὲ ὑπὸνέμοι, σὺν νόμῳ λείψα κατακαμφθέντες ὁδοῦ ἀμάχαις χόρτου πορευτὰς, ἐνίας ἀπολελοίπασιν. *Strabo*, lib. v. 235, p. 360.

A. M. Agrippa in *Ædilitate* post *Consulatum*, per meatus corrivati septem annes, cursuque præcipiti torrentium modo rapere atque auferre omnia coacti, insuper mole imbrium concitati, vada ac latera quatunt. . . . Amplitudinem *cavis* eam fecisse proditur, ut vehem feni largè onustam transmitteret.—*Plinii Nat. Hist.* lib. xxxvi. cap. 15.

¶ *Addison's Remarks on Italy*, p. 102.—See also *Wright's Travels*, p. 131. Pl. VI.;—and an account of it also by *Keyser*, Vol. III. p. 161; and by *Misson*, Vol. II. p. 365.

We find also the bridge of *Rimini*, to have been built by *Augustus*, and *Tiberius*.*

And that noble *Dome*, the *Pantheon*, to have been built by *Agrippa*, the son-in-law of *Augustus*, †—and the first great patron of arts, and of science.

Some persons indeed have conceived, that *the portico only* of the *Pantheon*, was built by *Agrippa*;—and that the *dome* itself was of a *prior date*.—But for such conjecture, there is no other support than mere fancy: whilst the perfect silence of all preceding ages, concerning its existence, bears almost positive testimony to the contrary—It is hardly possible to suppose, that so wonderful a structure as *this Dome* should never have been mentioned, or taken the least notice of, *before* the time of *Augustus*, if it had really been in existence; when so much was said in the Augustan age, and has been said ever since, concerning the wonderful boldness of the invention, and the marvellous execution of the design.

And as there is no good reason for conceiving the *Pantheon* to have existed before *that age*, so also, when all circumstances are duly considered, we must, I am persuaded, form exactly the same kind of conclusion, concerning the *Arco-felice* of brick, at *Cumæ*; ‡—and even concerning the aqueduct of *Ancus-Martius*, § notwithstanding the name it bears.

In short they appear every one of them, to have arisen, in their present *arched state*, nearly cœval with the *Pantheon*;—with the *Sepulchre of Augustus* himself;—and with many arched, vaulted temples, in the neighbourhood of *Rome*, ||—all of which seem evidently to have been deemed, *in that age*, as structures of a kind both *novel*, and *uncommon*.

* See Misson's Travels, Vol. I. p. 323.

† Wright's Travels, p. 212. Keyser's Travels, Vol. II. p. 310, 315.

‡ Wright's Travels, p. 182.

§ Ibid. p. 357.

|| Whoever examines *Overbeke's* curious account of the *Gates, Theatres, and Temples at Rome*; (in his *Reliquiæ Antiquæ Urbis Romæ*, Ed. Amstelædami,) in which work, the testimonies of the most antient authors, concerning as many of them as is possible, are carefully collected; will find, that almost all *those* in which *any arches* appear, have been ascertained to have been either of the age of *Augustus*, or re-edified by *Adrian*, or *Antoninus*, or *Severus*, or other Emperours, subsequent to the time of *Augustus*;—or at least to have been repaired by some of them.—And that even what is called the arch of *Horatius Cocles*,

Till any sufficient testimony, therefore, can be produced to the

and has been deemed the most antient of any, is clearly no structure built by any such person; but in very truth a structure, whose origin, is merely at present unknown.

The following little recapitulation, may perhaps be found interesting, to some of the curious.

The most antient part of the existing walls of Rome, after all the pains that have been taken to investigate their history, appears to have been of the time of *Aurelian*;—and the greater part of the time of *Justinian*; when they were the most thoroughly repaired.

The Porta Flumentana; cannot be traced up much higher than the time of *Aurelian*.

The Porta Collatina; is in walls, either built, or repaired in the time of *Justinian*.

The Porta Collina; appears, from several circumstances, to have been of the same age.

And the rest of the arches of the Gates of Rome, whose history has not been accurately ascertained, may justly be deemed, to have been rather of the age of *Justinian*, (when the thorough repair of the walls was made under *Belisarius*,) than of any other.

The very name of the *Basilica of Antoninus*, shews its age.

The arch of *Titus*,

The arch of *Septimus Severus*,

The arch of *Gallienus*,

The arch of *Constantine*,

all speak for themselves;—but no such kind of Triumphant Arches seem to have existed, or been heard of, before the time of *Verres*, and *Cicero*.

The arches in the walls of the area of the *Barberini* Palace, were appertaining to a Circus of the days either of *Heliogabalus*, or *Aurelian*.

The arches of the temple of *Favus*, or *Claudius*, could not have been prior to *that* reign.

The temple of *Romulus*, is allowed to have been rebuilt by *Adrian*.

The temple of *Peace*, standing on the remains of the palace of *Nero*, was begun by *Claudius*, and finished by *Titus*.

The temple of *Minerva*, was built by *Pompey the Great*.

The temple of *Saturn*, (the Roman Bank, or treasury,) was indeed in existence in the time of *Poplicola*;—but, from its important use throughout ages,—and from the style of its pediment at the top, it may justly be deemed to have been afterwards rebuilt.

The temple of *Venus*, was built in the time of *Adrian*.

The temple of *Juno*, as appears (by an inscription) was restored by *Septimius Severus*.

The temple of *Fortune*, of really decided high antiquity, has *no arch*.

The temple of *Vesta*, seems to have had *no arch*; no not even in its windows.

The temple of *Hercules* also, of really decided high antiquity, has *no arch*.

The temple of *Jupiter Capitolinus*, was rebuilt by *Vespasian*.

The temple of *Concord*, had *no arch*.

The temple of *Jupiter Stator*, appears to have had *no arch*.

The very name of the temple of *Antoninus*, and *Faustina*, shews its age;—if there had been an arch in it.

The temple of *Jupiter Tenans*, was built by *Augustus*, upon the old plan.

contrary, we are left unavoidably to conclude, that *the arch* was

The Basilica of *Nerva*, also accounts by its very name, for *any arches* in any parts, added to that which was of the original Grecian mode of architecture.

And the adjoining *Forum Nerva*, is known to have been begun by *Domitian*.

The temple of *Pallas*, in the same style, was of the time of *Nerva*,

The Basilica of *Caius*, and *Lucius*, the adopted of *Augustus*, must have been obviously after the time of *Augustus*.

The Theatre of *Marcellus*, was built by *Augustus*.

The *Amphitheatrum Castrense*, was a little prior in its date.

The *Colosseum* is well known to have been built by *Vespasian*.

The arches of the baths of *Agrippa*;

Of the baths of *Antoninus*;

Of the baths of *Nero*;

Of the baths of *Titus*;

Of those of *Dioclesian*;

are all clearly known to be of the ages *the names* import.

Whilst those of the baths of *Philip*, cannot be ascribed to any earlier period.

And those of the bath of *Paulus*, shew manifestly an elegance of design, *subsequent* to the time of the *Antonines*.

The aqueduct of *Aqua Claudia*; was of the age of *Caligula*.

That of *Aqua Antoniana*, of the time of *Caracalla*.

That of *Nero*, speaks for itself.

And that of *Aqua Virgo*; the earliest of any, seems to have had *no arches*; though it was a work at the expence of *Agrippa*.

The arches of the *Pons Horatii*, or *Emilii Lepedi*; must have been built after the age of *Olho*;—because Tacitus affirms the bridge was destroyed in his reign. (Hist. lib. i. cap. 86.

Those of *Pons Senatorius*; are the very arches that have been previously mentioned above, as placed by *Scipio Africanus*, only about one hundred years before the time of *Augustus*.

The *Pons Cestius*, was of the age of *Tiberius*.

The *Pons Tarpeius*, or *Fabricius*, was rebuilt in part by Pope Paul the III.

The *Pons Janiculus*, is understood to have been built by *Aurelianus*.

The antient *Pons triumphalis*, whose piers remained very visible, in the Tiber, about the beginning of this century, seems to have had *no arches*.

The bridge of *St. Angelo*, or *Pons Hadriani*, was of the age of *Adrian*.

The arches of the supposed *Granary of Anicetus*, cannot well be ascribed to an earlier age, than that of *Galba*, or of *Domitian*.

Those of the gardens of *Sallust*, cannot be older than the time of *Julius Caesar*.

The arches on the *Mons Caelius*; there is the utmost reason to believe were of buildings, that could not, any of them, be older than the reign of *Tiberius*.

Those on the *Palatine Hill*, can be in several instances actually traced to the reigns of *Verus*, and of *Heliogabalus*, and *Domitian*;—and, as far as any information can be obtained, none appear to have been more antient than the time of *Tiberius*, and *Augustus*, whose palaces were here.

invented no very long time before the age of *Augustus* ;*—that it was brought into *general use* only by *Adrian* ;—and that, with other parts of architecture, it had its ornaments reduced to fine proportions, and perfected, in the times of *Trajan*, and the *Antonines*.

And being of *so recent* a date, and considered as one of the most superb parts of architecture ; this circumstance alone may account for *the arch* not having been introduced in such hasty works, as those of the walls, and towers, of the great *Castra* in *Britain* ; or in any *common buildings* ; and may account also, for there being so few vestiges of *arches*, remaining any where in this island.†

The Capitol was so thoroughly rebuilt by *Vespasian*, and again by *Domitian*, that what remains of antient arches any where appear, in its structure, may justly be deemed rather of those reigns, than of any other.

Perhaps it ought just to be added, that the *Sepulchre of the Cuiatii*, (whenever it was reared) had no arch.

Neither had even the sepulchre of *Plautius* any arch.

The amphitheatre of *Verona*, is either of, or subsequent to the time of *Augustus*. See *Misson*, Vol. I. p. 189. *Panvini* *Antiquitatum Veronensium*, lib. iii. cap. 2. p. 90.

And the *Triumphal Arches* at *Verona*,—at *Spoleto*,—at *Rimini*,—at *Fano*,—at *Sura*,—and *Ancona* ;—are all known to be of still later dates :—the ages of *Adrian*, *Trajan*, and the *Antonines*, having afforded most of the *finest* specimens of this kind. *Misson*, Vol. I. 323, 159, 323, Vol. II. 574. *Wright's Travels*, p. 118. *Misson*, Vol. III. p. 152, 100, 153.

To these ages, therefore, we are in like manner to attribute the noble bridges at *Merida*, and *Alcantara* in *Spain* ; in the latter of which are arches 110 feet in diameter, and above 200 feet in height.—These are described by *Don Antonio Ponz*, in his *Víage de Espana*, and *Bernabe Moreno de Vargas*, in his history of *Merida* ; and some representations of them may be seen, in the *Gentleman's Magazine*, Vol. LI. p. 173.

* If this be the real fact, it is a very remarkable concurrence of *circumstances*, and *eras*, that the very first notice taken of the *form of an arch*, and the very first mention of it upon record, should have been when the glorious *rain-bow* in heaven was made the *everlasting sign*, and token of *Reconciliation* and *Mercy* ; and that the first *realizing of the arch*, and the first instances of the bringing of it into actual use, as a *part of architecture*, should have been precisely in the *era*, in which the *Promised Deliverer*, THE LORD OF PEACE, descended upon earth, and took upon him to be born as a man, to seal the first and original ever-lasting promise, and Covenant of Salvation.

† The exceeding curious account, given lately by *Sir George Staunton*, of the *Great Wall of China*, in the relation of *Lord Macartney's Embassy*, may perhaps at first sight appear to contradict the conclusions here formed, concerning the *late invention of the arch* ; because, in that stupendous fortification, of which the greatest part is allowed to have existed, in some form or other, at least two thousand years, *many arches* do unquestionably appear ;—and especially in the doors and windows of its numerous towers : as may be seen represented in the plan and elevations, Vol. II. Pl. XXIII. XXIV.

Little more remains to be observed concerning the works of the Romans in Britain, than just to mention, their long extended walls, from sea to sea:—that *temporary effort*, merely adapted to the rudeness and inexperience of the times, to stop the irruptions of Barbarians.

But a little fair consideration, and attention to all circumstances, will soon remove the objection.

For, in the first place, even suppose what now exists to have been the *original wall*;—the very wall that was completed about two thousand years ago;—yet even that period will carry us up only to about two hundred years, or a very little more, before the period which we have had reason, from the preceding observations, to assign for the first invention of the *arch*; and would only lead us to suspect, that its *first invention*, like that of *gunpowder*, might possibly have been in the more eastern parts of the world.

But, in reality, we find that the wall has undergone *continual repairs*:—for the words of our author are:

“ Many of the inner and weaker appendages to this great rampart have indeed yielded to the effects of time, and are mouldering to decay, and others have undergone repair.*

And indeed the very *substance* of the *arches*, and of the *towers* in which they are constructed, appears to have been such; that they could not have continued existing for any thing like the time of two thousand years.

By the accurate survey, taken by Captain *Parish*,† it appears, that the thickness of each parapet wall, at top, was only 1 foot 6 inches, and at bottom, only 5 feet; and that the thickness of the arches, in general, was only 1 foot 3 inches.—Let any architect in the world then judge, whether *such arches*, and *such walls*, could have stood as they were at first, and without rebuilding, for two thousand years.

And, at the same time, let it be considered, that Captain *Parish*‡ observed, that the *smaller towers* of the *old wall*, were indeed most frequently *solid masses*; with only a small building discoverable at top, to contain its little garrison.

And near the very gate-way of the wall, where he describes an *arch*, we are told, § “ the pass had formerly been closed by walls extending from the tower (in which the gate is) up the hills, on each side to the east and west, but those are now in ruins.

We are told also || that “ some of the kilns still subsist, near the great wall, where probably the bricks, of which it is composed were burned.”—Can such reasonably be supposed to have subsisted for two thousand years?

As therefore Captain *Parish* found, that there were indeed now¶ “ considerable breaches in the great wall itself, which afforded an easy opportunity of ascending, and examining it;” —and as the part they visited, and where they saw the *arches* in the towers, was near a great and important pass; ** where it must, above all other places, have been most frequently attended to, and repaired, if ever it was repaired at all; the fair conclusion is, that all the arches in question were formed and built, during reparations, long subsequent to the first rearing of

* Embassy to China, Vol. II. p. 181.

+ Ibid. p. 190, 192, 194, 195.

‡ Ibid. p. 186.

§ Ibid. p. 188.

|| Ibid. p. 198.

¶ Ibid. p. 189.

** Ibid. p. 186.

These walls have already been so well, and so fully described by many antiquaries, that on this occasion, it is merely necessary just to explain what they were, with the utmost brevity; as a final illustration of the nature of *Roman works*.

The effort towards forming such barriers, consisted at first only of a chain of forts, or Roman Castra;—*mere earthworks*, constructed by *Agricola*, at proper intervals, between the *Friths of Forth*, and *Clyde*: and most probably without any connecting, or intervening bulwark* whatever.

Next to this mode of protection, a great deep ditch, and *Vallum*, was thrown up the whole way, from sea to sea, more to the southward, by *Adrian*; with certain additional Castra, annexed to it, at proper distances, to defend it.†

Afterwards, in the reign of *Antoninus Pius*, was thrown up another and better *earthwork*:—another ditch, and rampart, nearer to *Agricola's* original Forts;—but still it was merely a wall built of earth, and turf;‡ near 40 miles in length, with proper Castra and munitions of earthwork, at proper distances.§

And last of all, the Emperor *Severus*,|| about the year 209, or 210,

the wall itself. And therefore *since* the æra which we have had reason to conclude was *that of the first invention of the arch*.

We may even venture to deem it then the fairest conclusion of all;—that *the arch* was not introduced into *China*, and *Tartary*, till some time after its first introduction in *Europe*; as seems also to have been the case in *India*;—where previous to that introduction, the covering and closing of doors, and windows at the top; and the substitute for *arched roofs*, was so exceedingly like what we find in the great *pyramid*, and in the ancient *temples* in higher *Egypt*. A circumstance that is finely illustrated by many of *Mr. Daniel's* most curious prints, and drawings; wherein the contrast between the *arched* Mahometan buildings, and the old Hindoo buildings, is finely, and accurately shewn.

* Tacitus, *Vita Agric. Cap. 19, 20.* Roy's *Military Antiquities*, p. 148. &c. &c.

† *Script. Hist. Augustæ*, p. 51. ‡ *Script. Hist. Augustæ* p. 132.

§ Of this wall and its munitions, there is a most curious and exact plan, with representations of the fortresses; in General Roy's *Military Antiquities*. Pl. XXXV.

|| *Ibid.* p. 563, Orosius lib. vii. c. 11. Bedæ *Hist. Ecc. lib. i.*

From some measures taken before that publication, it also appears, that the dimensions of the ditch, in some parts, where it appeared most perfect, near Hurlow hill, was 11 feet wide at the top, and about 9 feet in depth.

The whole was a most stupendous work unquestionably; but yet one that might be

built a *stone wall*, nearly of the same construction, with the first Roman work at Richborough ;—the height whereof, was 12 feet, exclusive of the parapet; and the breadth, (as has been before mentioned) 8 feet; the whole being built to the northward, * of the original wall of *Adrian*, but very near to it.

Along this last wall were fortresses of three different kinds.

First; *Stations*, or *Castra*, as head quarters ;—some square, and some oblong; and of very nearly the same construction with the other Roman *castra* that have been described.—And these *Stations* were situated principally at the two ends; and near the middle of the wall.

Next it was secured, by *Castles*, about eighty one in number ;—each of which was about 66 feet square, and in general of considerable height.

And in the third place, there were numerous *Towers*;—about 12 feet square; projecting *inwards* from the wall; and, as appears from the faint traces that remain of them, at the distance of about 300, yards, or 900 feet from each other.

And just within these walls, running all along by the side of them, military ways were raised; for the convenience of marching troops from one *Station* to another; and from one *Castle*, or *Tower*, to another.

It is also to be remarked, that the whole wall, was constructed, like those we have already mentioned, with regular layers, or *ἑταῖαι*;†— whilst its foundations, as well as those of its towers, are

finished with much greater ease, and in a shorter space of time, than is in general conceived. For we find from Josephus, (de Bello Jud. lib. v. cap. 12. sec. 2.) that *Titus*, when he surrounded the whole city of *Jerusalem*, with walls, and forts, in order to form a complete blockade, finished the whole, *in three days*;—though it was 39 furlongs, (or near five of our miles) in length; and had thirteen forts, or *Castra*;—which were most probably just such as those near *Agricola's* wall in Britain.

* The whole almost of this wall of *Severus*, was remaining nearly quite entire, except in the parts, where the *Picts* had made their breaches, and irruptions, in the time of *Bede*. *Bede Hist. Eccles. lib. i.*

† See before p. 39, 161. The antient walls of *Turin* also, and of *Verona*, had the same sort of regular *layers*. *Archæologia Vol. IV. p. 96.*

found to have been formed of mere rough stones, without any cement; buried in the primitive clay, where the nature of the soil was such;* or else merely laid on the natural ground, and still without cement.—Just as at *Richborough* the foundation of the walls was laid merely on *pit sand*; having then a thin stratum of chalk nodules; and then a row of loose bolder stones; and over that another layer of chalk nodules, before the least cement was used.

These prodigious, and strong barriers of *Antoninus*, and *Severus*, though raised with so much care, were soon afterwards broken through.—And with these last so magnificent, but so ineffectual efforts of defence, ended all the splendour of *Roman* power, and grandeur, in this country.

As in the former account of the first *Britons*, and of their rude stupendous works, some further illustration was endeavoured to be derived, as to their customs, and manners, by means of tracing out the appearance of their accustomed dress, and armour, from the best information afforded us;†—so in this account of the *invading Romans*, it may be useful to give a little detail of their military garb and appearance;—and the rather, as we have a most unquestionable means of ascertaining it, in the figures sculptured on *Trajan's* pillar, and on the *Antonine* pillar;—exact representations of which have been so finely preserved by *Bartoli*.

In Pl. $\frac{xxviii}{11}$, therefore, is given the representation of the marching of a part of a *Roman* army, over a bridge of boats;—which is copied exactly from the representation of a part of *Trajan's* army crossing the *Ister*, or *Danube*, in his first *Dacian* expedition:—when we may be well assured the whole *habiliment* of his soldiers, was very nearly just the same as that of the Romans in Britain.

The *Prefect*, or *Tribune*, at the head of the *first Cohort*, is represented,‡ as just reaching the end of the bridge, and halting to give some orders.—In his hand he holds the military roll, or *muster roll*:—he has the belt of honour; and the short sword worn on his left side;—is *thoracatus*, or armed with the breast plate;—and has upon him, over his armour, the *paludamentum laticlavum*, or fringed military vest of honour.

* See Mr. Essex's Observations in the *Archæologia*, Vol. IV. p. 76.

† Vol. I. p. 100, Pl. $\frac{1}{2}$.

‡ From *Bartoli's* 4th and 5th Plates.

On his right hand marches the Standard-bearer of the *Legion*, bare-headed, carrying the *Roman Eagle*; the so well known *abomination of desolation*.—It was generally of molten brass, and gilded; and was frequently adorned with the *bullæ aurea*, hanging pendant at its neck; which is well known to have been an hollow golden ball, containing some supposed amulet, or secret charm; an ornament originally first worn by generals, in their triumphal processions.

Behind these two, march the *Vexillarii*, or two ensigns, of the first maniple, carrying standards, with exactly the same device on the top of each, to point out the maniple;—but with the ornaments upon the staff of each, somewhat different, to distinguish them one from the other.—These standard-bearers have *helmets* of uncouth shapes, devised to strike terror into the enemy; over which they wear, as was most usually the case, shagged lions skins, with the manes, and hair, waving and floating over their necks, and shoulders.—And in some instances, instead of lions skins, they had bears skins.

Just after these, comes a *Vexillarius* (or as we should call him, *Cornet* of horse) belonging to the *Equites* of the *Cohort*;—and carrying the *Vexillum*, which was always formed of a small banner of cloth, whereon the name of the Emperour was usually embroidered in letters of gold;—but, like the Eagle-bearer, he wore neither helmet, nor lion's skin.

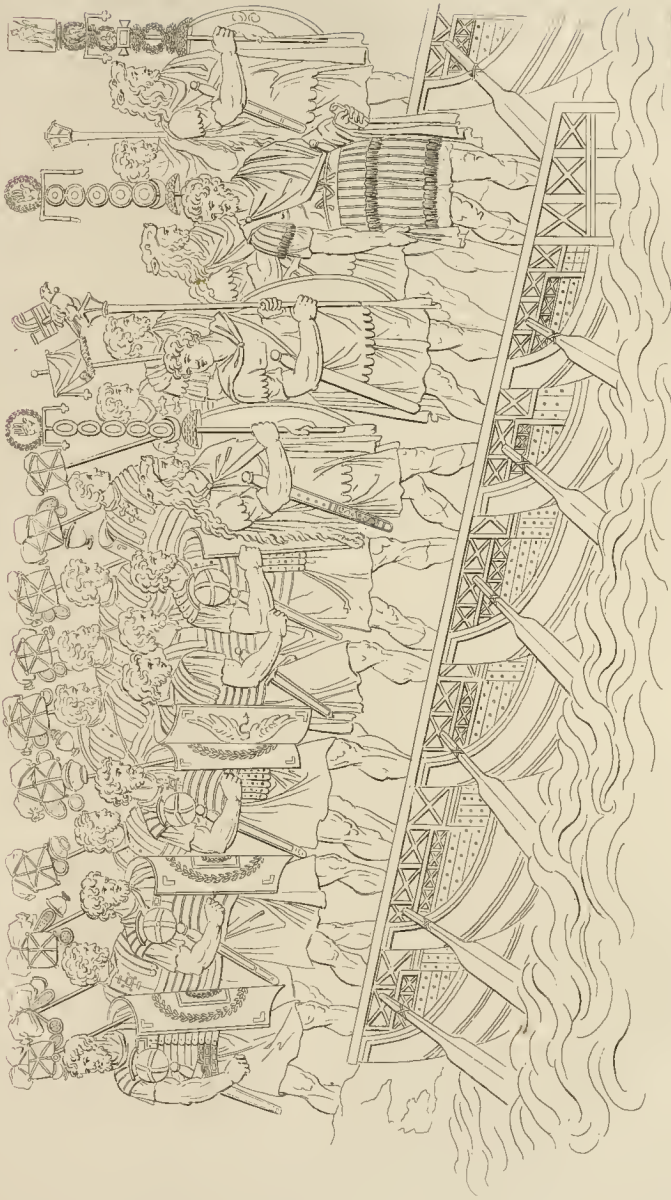
A little to the left of the furthest of the *Vexillarii*, is seen, a person, probably one of the *Tergiductors*,* bearing on a staff a *lantern*, or vessel for holding flaming combustibles, to guide the maniple in the night.†

After these, come the *Legionary soldiers*, marching two and two;—each having his helmet hung upon his right breast;—armed as has been described in the preceding pages;‡—having the sword on

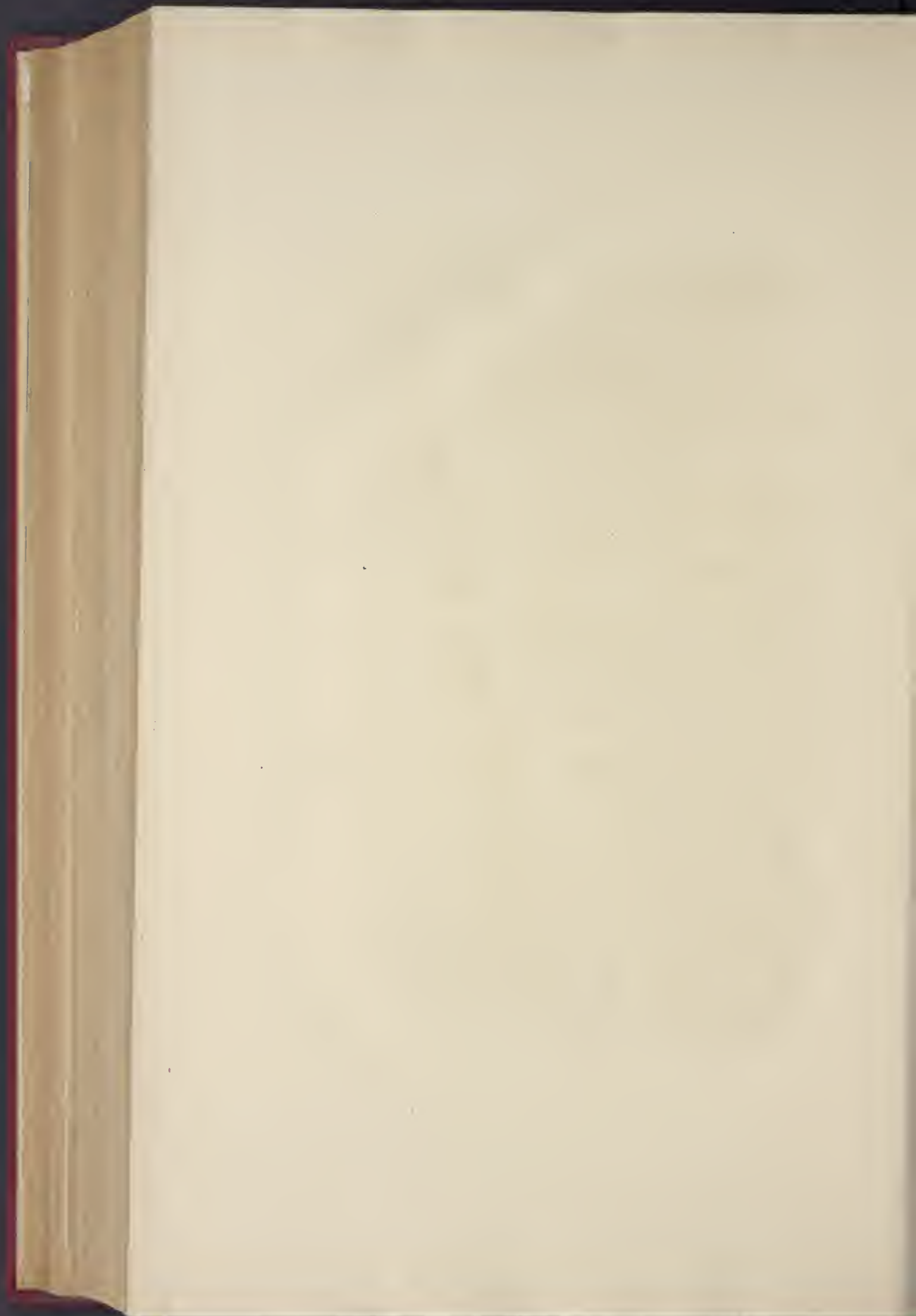
* See before, p. 77.

† It is a matter of interesting curiosity to remark, that we have here the representation, of one of those kind of *lights*, which are mentioned in St. John's Gospel, on the shocking occasion of the betraying, and arresting OUR BLESSED LORD, when Judas having received a band of men, from the chief priests and Pharisees, came μετὰ φανῶν καὶ λαμπάδων, with lights and torches.—And that we have also, on *Trajan's Pillar*, the appearance of one other kind of them burning,—as is shewn in Pl. xxviii, No. 1, fig. 5.

‡ See before, p. 78.



Part of a Roman army passing a Bridge of Boats.



the right side ;—having the long semi-circular shield, containing some *darts*, in its hollow part, and distinguished by some particular device ;—and carrying, on the top of his *pike*, or spear, a square bundle, containing a small bag of ammunition bread, or else of parched corn ;—another of small bits of dried flesh, or of salt meat ;—a little pitcher of wine, or vinegar :—a small iron plate, pierced full of holes, for baking or broiling ;—and a sort of small iron ladle, or large spoon ;—the whole weight amounting sometimes to about sixty pounds.

Just before the person who carries the *lantern*, or vessel for flaming combustibles, is another Ensign ; who bears a Standard with the devise belonging to *another manipule*. This figure could not well be left out, but it does not properly belong to this group. It belongs rather to another party represented on Trajan's Column, as passing over *another part* of the bridge, which by means of the want of proper keeping in the design of the original bass-relief, is confounded with this, as plainly appears from the odd projecting end of the boat.—And indeed, that this ensign, belongs to that *other party*, and to *another manipule*, will be obvious to every one, who examines the figures on the pillar, because just before him, in that representation, is found his companion marching, and bearing the other similar standard of the same manipule, with its proper marks of distinction in its ornaments.

In the Frontispiece to this Volume, is represented* a *Roman General* giving directions from the *Prætorium* ; and standing on the usual raised platform.—The whole is taken from the representation, on *Trajan's Pillar*, of that Emperor haranguing the XIII legion, called the *Dacian legion* ; whom he left for the protection of that province, after the first Dacian war.—And he is supposed to be here committing the province to their protection.

The *Eagle*, and the Ensigns of the *first manipule*, appear at their head ;—but the ensign-bearers are without their lions skins, and helmets ;—and on this occasion the soldiers are unarmed :—they are holding up their hands, in the manner that was usual as a sign of obeying orders ;—and on each side of the Emperor stand two Tribunes.

* From Bartoli's 37th Plate.

This group properly ends, on the pillar, just before the *eagle*:—but (for the sake of shewing the appearance of *Roman* soldiers, at the *Tribunal*, on other occasions,) there is added here, behind this second great Eagle,* a band of soldiers armed, as they are made to appear, in the bass-relief, standing and receiving an exhortation from Trajan, on the beginning of the second Dacian war.

In Pl. $\frac{\text{xxviii}}{12}$, in order to illustrate the accounts in the preceding pages a little further, is represented the usual manner of storing forage, and provisions, fenced, and secured, on the banks of a river; to be ready for the supply of distant troops.

And in Pl. $\frac{\text{xxviii}}{13}$, is represented the manner of placing the same, on the inside of the *Vallum* of a camp; in the space usually left between the tents and the rampart; which latter is here seen rising high behind, above the wooden fence.

Of these representations, the *first*, is taken from *Trajan's* pillar; †—and the *second*, from the *Antonine* pillar. ‡—They seem indeed to have been designed, in those *bass-reliefs*, as representations of *depots* of stores, for the use of a Roman army on the banks of the river *Dravus*;—but we may be assured, such would be arranged in *Trajan's* time, or in that of *Antoninus*, in any other country, exactly in a manner similar to that in which they would have been arranged in any camp in *Britain*, during those reigns:—and most likely stood in this identical manner by the wall of *Antoninus*.

Fig. 1, and 2, were granaries—Fig. 3, a pile of timber, and wood for the various purposes of building huts, and little turrets, and for fuel. Fig. 4, 4, stacks of hay, and straw.—And fig. 5, a watch turret, with its beacon for signals.

In a *Camp*,—fig. 6, 6, 6, are again granaries.

Fig 7, 7, are stacks of hay, or straw.

Fig. 8, shews another mode of constructing the piles of timber, and wood.

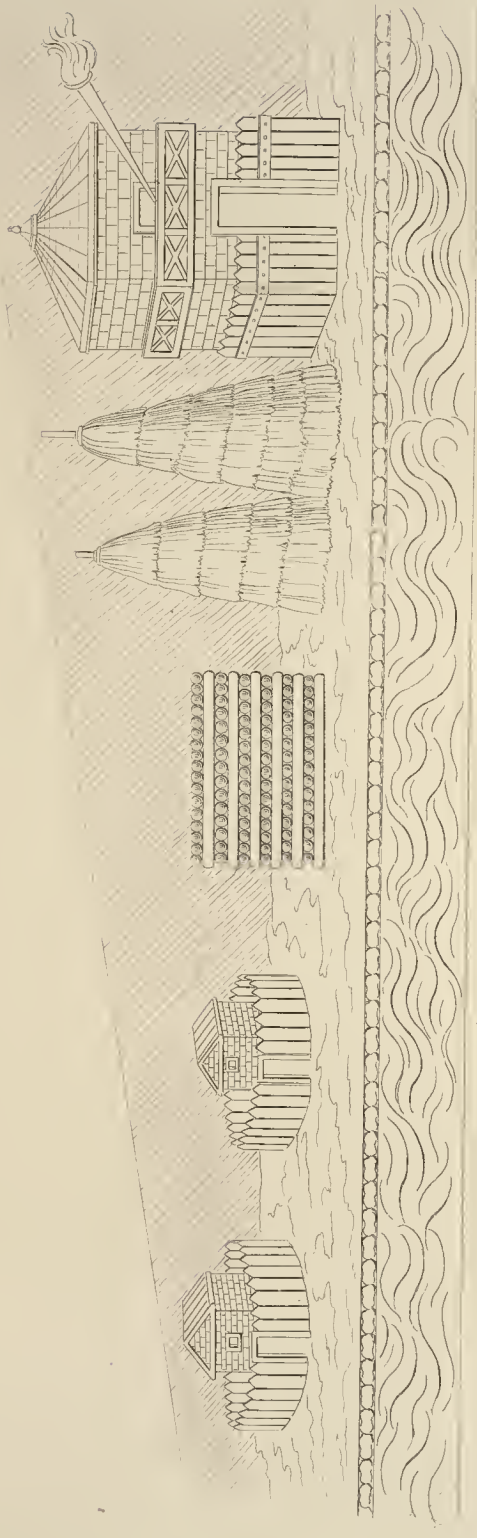
Fig. 9, represents a turret, for watching, and mounting guard.

And fig. 10, shews the appearance of the *Velites*, or light armed troops, with their light round shields;—who were the part of the troops usually appointed for the guard of the ramparts.

* See Bartoli's 79th Plate.

† Ibid. 1st Plate of his *Columna Trajana*.

‡ Ibid. 4th Plate of his *Columna Antoniana*.



Roman Mode of Placing their Military Stores. Source S. Page 2



An intelligent mind will easily make allowance for the total defect of what modern artists call *keeping*, in these most antient representations.—Figures of men appear as high as buildings, or higher, and sometimes as high as mountains:—but yet the whole is perfectly intelligible:—nay perhaps even the more so:—for figures of soldiers in just proportion to the buildings, could not shew, as the *Trajan*, and *Antonine* Pillars still do, the precise form of their dress, and of its drapery.

And now after having been led to contemplate with admiration, the vast exertions of the Romans in this country, for its subjugation, civilization, and preservation; the last ending almost of all their proud dominion;—it is time to turn the other end of the perspective, and to consider, with what limitations we ought really to appreciate both the advance they had made in civilization, and the circumstances that ought to form a counterbalance to too high a veneration for them;—as this consideration will shew the more exactly, how very *gradual* has been the progression that has taken place in improving the state of mankind.

It is usual with a sort of awful reverence, and astonishment, to reflect upon the imagined magnificence of the *Roman empire*.

And it is possible, that the *Vicar of Britain* himself, in the time of *Julian*, *Valens* and *Valentinian*, (if he had been allowed to have had a vision of the ages that were to follow,) would, with his *green book* of instructions* under his arm, the well known badge of his office, (though he was himself only a *subordinate* officer under the *Prefect of Gaul*), not only have looked back with contempt upon the dominions of *Cassibelanus*; *Caractacus*; and *Cogedunus*; and of all the preceding

* *Constantine* divided the whole Roman empire into four governments, or *Prefectures*:—that of the *East*;—that of *Illyricum*;—that of *Italy*;—and that of *Gaul*.—This last comprehended Gaul, Spain, and Britain; and was ruled by a great officer, called the *Prefect*; who had under him, in each of these countries, a subordinate officer, called a *Vicar*. The *Vicar of Britain*, resided chiefly at London; and his authority extended over all the provinces in this Island. His title was *Spectabilis Vicarius*; and the ensign, or badge of his office, was a *book of instructions*, in a *green cover*, whereon was the representation of five castles, placed in the triangular form of the Island; to denote the five provinces under his jurisdiction, each of which had also a particular sort of deputy governor, who resided within the province.

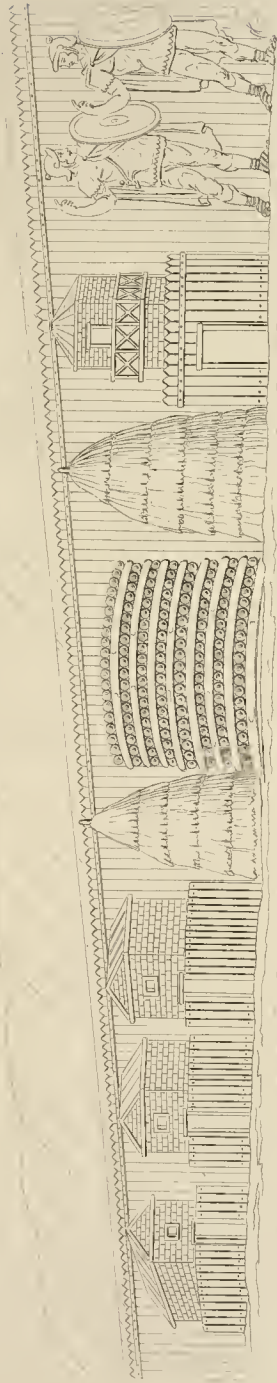
See *Zosimus*, lib. ii.; and *Notitia Imperii*, cap. 49, and *Heineccius Antiq. Rom.* Tom. IV. p. 258.

petty Princes of Britain ; (the whole of whose united dominions he ruled over, under the instructions of his *green book*, and under the superintendancy of the Prefect of Gaul) ; but would have looked forward also, with equal contempt, on the succeeding dominions of those, whom we are accustomed to call great *Saxon*, and *Danish* princes ; *Egbert* ; *Alfred* ; and *Canute* ;—and perhaps even upon their great *Norman* Successors : considering, according to the train of ideas to which he had been most accustomed, how limited, in extent of territory, their dominions appeared, in comparison even of his own power ;—and how much more so in comparison of that of his *great Prefect* ; who had all those regions which have since formed the distinct Kingdoms of *France*, *Spain*, and *Great Britain*, under his command.

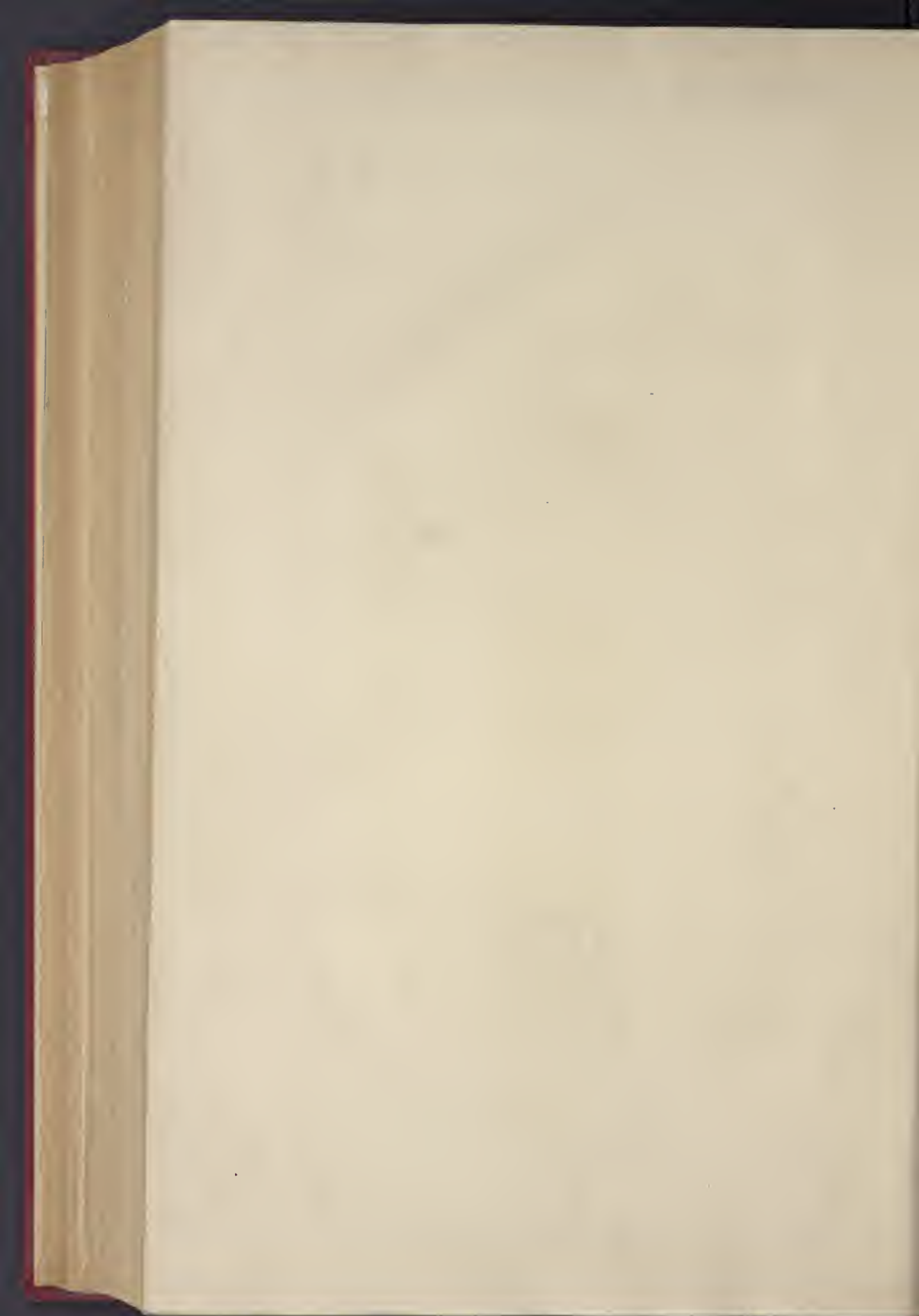
Yet when things are duly weighed, in the true balance of faithful historical estimation ; how insignificant does this *Vicar of Britain*, this mere *Superintendent*, with his *green book* of instructions under his arm, appear ?—or how little does even the magnificent *Prefect of Gaul* himself appear ?—as officers merely governing Savages a little civilized, and a few Roman settlers ? in a situation not much superior to that of a former American Governor of colonies ?—and how much less, in reality, does he appear in comparison of a King of Great Britain, in these later ages of civilization, ruling over a great, rich, and powerful people ;—sending fleets, and armies, to all the regions of the world ;—and enjoying, by the unmerited blessing of ALMIGHTY GOD, together with the Light of the Gospel, more substantial conveniences, comforts, and advantages of life, and more fruits of science, than the whole either of *Constantine's*, or of *Julian's* empire possessed ?

And how ought this reflection to fill each British heart with unfeigned thanksgiving, towards that ALMIGHTY BEING, Who having caused this Island, *so early*, to receive the light of the Gospel ; and also so soon to recover from the corruptions with which that light had become for a time obscured ; has also permitted it, *so long*, and so late, to enjoy all its concomitant blessings !—How careful, and how diligent also, ought every considerate mind to be, still to preserve them !

At the same time, however, we ought not to forbear doing justice



• Roman Mode of Placing their Stores in the Space by the Ramparts.



to the efforts of those first ages, when this country began to emerge from its aboriginal wretched state.

However barbarous, the *Britons* in general might be, (both the first and latter settlers), on the first invasion of the Romans;—and of however little importance to the Roman empire, any dominion over them was; yet the Britons soon manifested considerable signs of rapid improvement, both in the exercise of their mental faculties; and in the industrious application of their manual operations.

Their artificers became gradually some of the best workmen:—insomuch, that from the time of *Agricola*,* (who first taught them to build regular houses, and temples), to that of *Constantine*, they had been so constantly employed, and were become so expert, that when *Constantius* rebuilt the city of *Aulun* in Gaul, in 296, he was chiefly furnished, for the purpose, with workmen from *Britain*, who were esteemed the best artificers of all.†

Their agriculture also was not only worthy of commendation;—but became both useful to the empire in the highest degree, and even necessary.—*Julian* employed no fewer than eight hundred vessels to transport the corn from hence.‡

Money also was coined here in great quantities;—insomuch, that *Gunobeline* made forty different coinages at least;||—and there were so many others, that at last an edict of the Emperour's was issued, that no money should be used in Britain, except such as was stamped with the effigies of Cæsar.¶

And the numbers of vessels, and small ships, constructed here, became so numerous; that *Carausius* found he had the advantage of such a provincial fleet in the British harbours, as even tempted him to aspire to the Purple: and when *Constantius* afterwards came to oppose him, he not only thought it necessary to have a thousand sail; but in the end was indebted, in a great degree, to the advantage of a thick haze for his success.

To which we may add, that *True Religion* was also eagerly

* Tacit. Vita Agric. cap. 21.

† Eumenii Panegy. 8.

‡ Ammianus Marcellinus, lib. xviii. cap. 2.

§ Zosimi Hist. lib. iii.

|| See Speed, p. 174; and Mr. Pegge's very curious Essay on the coins of Gunobeline; Lon. 1766; and Gough's Camden, Vol. I. p. lxv.

¶ Sheringham, p. 391. Gildæ Hist. Præf.

embraced here, with uncommon ardour, and cultivated with the most sincere intentions:—of which the religious establishment at Bangor, was a well known proof.—An establishment, free from all *monastick* restraints; and consisting of entire families, formed by persons who, in those days of turbulence, gladly sought peace, retirement, and study; not forgetting to maintain themselves honestly by their own industry;* whilst they promoted true science, as far as the circumstances of the age would admit.

There was, in process of time, besides this establishment at *Bangor*, a Seminary at *Llandaff*;—where one *Dubricius* taught;—and there was also another at *Llantwit*, in the same tract of country, near *Carleon* in Glamorganshire; where the most noble of the *British* youth were instructed, by one *Illutus*.

When once, however, the flowing tide of these advantages, under the protection of the Romans, began to turn;—it is but too true, that a most dire ebb, and rapid declining of prosperity, even hastened by the peaceful calm which these advantages had obtained, directly took place.

The *Romans* who had estates in Britain, sold them,† and departed; giving up all further ideas of profit.—The country was found drained of its *best soldiers*, and of all it most *able workmen*, to uphold the tottering remains of the Western Empire.—And at once, all the most inveterate vices of the untameable, corrupt, gross mass of barbarous Britons, who had been far indeed from improving by the advantages of any of the *seminaries*, burst forth with unlimited controul; and contributed to eradicate every good energy remaining in any mind.—The whole of this effect, is forcibly described by the venerable *Gildas*,‡ whose description, though perhaps exaggerated by the efforts of pious declamation, must be allowed (as he was an eye witness) to have been substantially true:—in short, a state of barbarity, and rudeness, in the end of this *Roman-British* period took place, almost worse than that in the beginning of it.

The ferocious disposition of the *British chiefs*; and their propensity to robbery, and plunder, wherever they had any oppor-

* Bedæ Hist. Eccles. lib. ii. cap. 2.

† Zosimus, lib. vi.

‡ Gildæ Hist. cap. 16, 19, 21.

tunity, revived.—Their detestable custom of drinking to the utmost excess;—and their horrible oppression of the inferior ranks, who were, according to their laws, even legally *actual slaves*, revived with tenfold depravity.*

And as the practice of *idolatry*, according to its *Celtic superstitions*, had still continued amongst several of the *British Provinces*; † whilst a new, and even a more corrupt, though more refined species of *idolatry*, had been encouraged by the *Romans*; it led them easily to assent further, to the gross *Saxon idolatry* of fresh Invaders; by whom at last, the poor band of Christians at Bangor, (*originally* so sincere, and so excellent) were utterly massacred. ‡—And with them every remnant of true piety became almost entirely extirpated, and driven out of the land.

Soon after the departure of *the Romans*, the deepest and most

* These inveterate habits, and dispositions, of the antient Gauls, and Britons, are mentioned in the strongest terms, by the best informed writers; See Livii Hist. lib. v. c. 35. Cæsar de Bello Gallico, lib. vi. c. 13, and c. 23.—Tacitus de Moribus German. c. 14. Xiphilin ex Dione Nicæo in Sever.—Strabo, lib. iv. p. 199. See also Martin's Description of the Western Islands, as to later times, p. 106.

† Gildæ Hist. c. 2.

‡ From the tenor of venerable *Bede's* history, we obtain a very sufficient idea even of the precise mode, in which the knowledge of Religion, and of Science, made its way amongst the Britons.

The substance of what may be inferred from his account, when analyzed, is this :

Plain uncorrupt Christianity, having been preached here, in the simplest manner, in the very earliest ages after our Lord's ascension; continued to produce the clear light of useful truth, with the best effects, for a time.—But very soon, rash, needless dogmatizing, of unable, well meaning, injudicious, violent men;—and presumptuous cavillings, of crafty, ingenious, subtle, conceited disputants; lighted up just such animosities, and just such a dire flame of religious contention, here in the West, as had been so early lighted up in the East; according to the very prediction of our Blessed Lord himself, (Matt. c. x. ver. 34, 35, 36. Luke xii. chap. 49.) And in the end, these sort of contentions became the cause of those dreadful corruptions of Christianity, which have done every thing, that the powers of *hell* could well devise to be done, for many centuries, for the extinguishing of the Light of God's Word.

From age to age, they have constantly produced *contrary extremes*, one after another.—First therefore appeared here in Britain, about the year 420, *Pelagianism*—and then, by degrees, appeared *Papery* in full perfection.

Whilst *the Truth* (with the emblematical woman spoken of in the Divine prophecy of the Revelations.—c. xii. v. 6.) was fled into the wilderness.

To heal,—or rather to *oppose* the mischief of *Pelagianism*,—*Germanus*, and *Lupus* came

dark ignorance took place in *Britain*, amongst all ranks :*— and skilful workmen were hardly to be found for the most ordinary purposes.†

Instead of affording a supply of corn to the Continent, as this Island had for some time done ; its inhabitants became nearly starved ; and once more reduced to hide themselves in forests, dens, and caves, like their aboriginal ancestors :‡—and to seek for subsistence, like their Pictish neighbours, from plunder, when they could get it.

Such is the sad reverse that soon appears upon the *page of History*.—For the mere *political History* of mankind, is indeed in itself, for the greater part, only the History of *violence*, and *blunders* ;—of *wickedness*, *craft*, and *folly*.

from the continent to *Verulam* ; and they at length succeeded, so far as to drive their adversaries out of the field.

They then established schools, and seminaries of learning, as a means of maintaining their own ground, by the assistance of teachers, under their own eye.

Dubricius taught in one of their seminaries at *Llandaff* ; and *Ilutus* had a great school of education at *Llantwit*, in Glamorganshire ; and there was another Seminary of learning also by one Daniel. *Dubricius* had a place of study on the River *Wey*, and another at *Moshross* ; and is said to have instructed at least a thousand disciples.—He formed also twelve associations of religious persons, which were afterwards called *Monasteries*, and made *Bangor* one of them.—And he honestly taught the persons, thus associated, still to earn their subsistence with the labour of their hands.—He was afterwards himself appointed, from Rome, first Archbishop of *Caerleon* ; and then of *Llandaff*.

In process of time, these Seminaries, in general, and especially those at *Caerleon* and *Bangor*, became regular fraternities of *British Clergy* :—Teachers of Religion, and Instructors, of Science, living thus together as the Druids had done ; and issuing forth, from time to time, to all the neighbouring parts, to teach and instruct the people ;—which they did with such constant zeal, and perseverance, that within one hundred and fifty years after the subduing of the Island by the Romans, almost all the western part of Britain was become Christian.

And most truly Christian it continued for many years.—But the irruption of the *Saxons* :—their massacre of the Christian clergy of *Bangor*, (where all the most curious records and best learning of the times perished ;)—and then the darkness, which Saxon fierceness and new kinds of paganism spread over the whole country, prepared the way, on the *Saxons* conversion by *Austin*, for the introduction of the errors of Popish superstition, and of a most dire corruption of Christianity itself ; notwithstanding the sincere devotion, and excellent intentions, of those amongst them, who in such days of bitter turbulence, and violence, founded

* Bedæ Hist. Eccl. lib. i. c. 14.

† Ibid. lib. i. c. 12.

‡ Ibid. lib. i. c. 14. Gildæ Hist. c. xxv.

And from the long parading detail of its events, when unconnected with apprehensions of the awful, over-ruling, appointments of Divine Providence, little else is to be learned, on the first glance, except the temporary success of low cunning; and the sad inefficacy of the struggles and exertions of great, honest, enlightened, and virtuous minds, to stem the torrent; and to prevail against the prejudices, obstinacy, and errors of the times wherein they lived;—and to which, aided by the crafty malice of the envious, they have most usually fallen a sacrifice.

But amidst the dire gloom of this melancholy scene, the contemplation of the hand of Divine Providence over-ruling the whole, clears the prospect.—And we slowly learn to apprehend, that Infinite Wisdom, whilst it permits the *free agency* of imperfect human beings, is yet continually bringing forth *good* out of *evil*;—causing the perverse spirits of wicked men to be their own tormentors, and the punishers of those who have been equally perverse;—and raising up, from time to time, both instruments of vengeance, and

Religious Houses, as places of refuge for serious, peaceful, and ingenious minds, from the storm and tempest, in which the country was then tossed;—and as nurseries for science, and for arts;—where, in reality, we shall in pursuing our present inquiries, soon find were alone preserved the vestiges of antient learning;—where the first dawns, in this country, of that mathematical and philosophical knowledge, which has since enriched the world, began to appear;—and from whence proceeded those sublime and awful improvements of architecture amongst us, the accounts of which will fill the pages of the ensuing Volumes.—For as to the *British* establishments at *Bangor*, and elsewhere; there is no reason, from any traces, or records whatever, to conclude that *they* had any magnificent buildings at all belonging to them:—or that *their* institution consisted of any thing more, than a mere assemblage of pious, intelligent, industrious families, choosing to live in one harmonious society, apart from turbulence, for the sake of mutual benefit, and instruction; and dwelling merely in such usual small habitations, as were common to all the middle ranks of people, in those times; and were easily constructed in each others vicinity.

It ought perhaps to be added, that from the very event which brought on the final destruction of the Monks of *Bangor*, it obviously appears, that even *their* religion seems to have degenerated, not a little, towards superstition.—For the one thousand two hundred and fifty, who were slain by *Ethelfred*, King of Northumberland, in the year 613, had been persuaded by *Broemil* King of *Powis*, near Chester, to accompany him to *pray* for his success; with a presumptuous confidence in such kind of *rite*, not very unlike to that of the aboriginal Britons, when they assembled an host of *Druids*, in the Isle of Anglesey, to accompany their army, and to prevail (as they expected) by their superstitious rites, and ceremonies, against the Roman arms, See *Beda Hist. Eccles. lib. ii. c. 2.*

instruments of blessing, to bring to pass great changes, and events; in such manner, as may best lead to the final accomplishment of all good.—This wondrous plan is pointed out, by the awful indications of *Holy Prophecy*:—And the consideration of *This Overruling Power*, like a beam of pure and perfect light, bursting through a cloud, irradiates the whole;—and renders even the tedious narration, and the offensive picture of the combination of human wickedness, and of human folly, in the highest degree interesting.

On more deep reflection, therefore, pondering in the mind each page of History, we cannot but be led to contemplate, with the utmost eagerness and attention, every circumstance, however in itself reprehensible, that tends at all to shew, *how*, and *by what instruments*, the several great corruptions of mankind have been gradually done away; in any parts of the world:—and how arts, and science, and the knowledge of truth, have been made still to advance, in defiance of obstinate prejudices, and inveterate errors.

Thus, in the present instance, although the Invasion of this Island by the *Romans*, was utterly unjustifiable on their part; and was the effect only of proud ambition,—of avarice,—and of an oppressive spirit of dominion:—was attended with many horrid cruelties; and most afflictive to the *Britons*:—yet we cannot but *now* reflect, with admiration, how it became the means of putting an entire end to the horrid abominations of *Druidical superstition*; and of punishing the maintainers of those infernal cruel rites, and detestable observances, by which the primæval *Patriarchal Religion* of the world had been so grossly, and so soon corrupted:—and how it became the means of civilizing this Island;—and of introducing arts, and science; and at length even the *Light of the Gospel*, amongst the *Britons*;—to whom, (after they had first so severely felt the scourge) this very Invasion became, in the end, one of the greatest advantages; even notwithstanding the temporary relapse, on the departure of the Romans.

We have, in the former part of these investigations, seen how rude were the munitions, and how comfortless the habitations, both of the aboriginal *British* inhabitants; and of the additional *British* settlers:—and how gross, and barbarous, though in some instances so stupendous, all their works were.

We have, now also, in the preceding pages of this Volume, seen *what sort* of Fortresses, and what improved ideas of Civilization, and Discipline, the Romans introduced amongst them; even whilst they made them groan under an iron rod.

And the next step, in the progress of our enquiries, will be, to consider what efforts of *Imitation*, were at any period made by the *Britons*;—either copying *Syrian*, and *Phœnician* Castles, from the reports of their traders in tin;—or constructing strong Mansions of residence for their Princes, after they had become acquainted with the style of *Roman Architecture*.—And it will still be found, that even blundering efforts advance the state of mankind;—that very despair produces hope;—and that crafty wiliness deprives itself of natural advantages;—defeats its own purposes;—and procures its own destruction.



INDEX THE FIRST,
OF
PASSAGES
IN
THE HOLY SCRIPTURES
REFERRED TO, OR ILLUSTRATED
IN
THIS WORK.

| | PAGE | | PAGE |
|--------------------------------|---------|----------------------------------|------|
| Exodus, chap. xxv. ver. 9 - | 224 | 1 Kings, chap. vi. ver. 2, 3 | 224 |
| chap. xxvi. ver. 16, | | chap. vi. ver. 17, 20, | |
| 18, 22, 23, 25 | 98, 224 | 23, 24, 25 - - | 224 |
| chap. xxvi. ver. 29 | 98 | chap. vi. ver. 29, 31, | |
| chap. xxvii. ver. 9, | 98 | 32 - - - - | 225 |
| 10, 16, 17, 18 - | | chap. vii. ver. 15 - | 224 |
| chap. xxxi. ver. 2, 7 | 97 | chap. vii. ver. 16, 17, | |
| Numbers, chap. ii. ver. 2, 3, | | 18, 19, 20 - - | 224 |
| 4, 10 - - - | 96 | 1 Chronicles, chap. xxviii. ver. | |
| chap. ii. ver. 3, 5, | | 19 - - - | 224 |
| 7, 10, 12, 14, 18, | | 2 Chronicles, chap. iii. ver. 4 | 224 |
| 20, 22, 25, 27, 29 | 98 | chap. iii. ver. 8, | |
| chap. iii. from ver. | | 15, 16 - - - | 224 |
| 3, to ver. 38 - | 98 | Jeremiah, chap. xxxvi. ver. 22, | |
| chap. iv. ver. 7, 9, | | 23 - - - - | 178 |
| 11, 13 - - - | 99 | Ezekiel, chap. xii. ver. 5, 7 | 242 |
| chap. vii. ver. 3 - | 99 | Daniel, chap. xi. ver. 31 - | 24 |
| chap. x. ver. 4, 5, | | Tobit, chap. ii. ver. 9 - | 242 |
| 14, 17, 18, 21, | | Esther, chap. iv. ver. 11 - | 257 |
| 22, 25 - - - | 99 | chap. v. ver. 1, 2 - | 257 |
| chap. xx. ver. 4 - | 99 | chap. xv. ver. 6 - | 257 |
| chap. xxiii. ver. 9, | | Matthew, chap. viii. ver. 5, 8 | 107 |
| 14 - - - - | 99 | chap. x. ver. 34, 35. | |
| chap. xxiv. ver. 5 | 99 | 36 - - - - | 285 |
| 1 Samuel, chap. xvii. ver. 7 - | 78 | chap. xvii. ver. 20, | |
| 2 Samuel, chap. iv. ver. 5, 6, | | 22 - - - - | 200 |
| 7 - - - - | 209 | chap. xxiv. ver. 15 | 523 |

INDEX. PASSAGES OF SCRIPTURE.

| | PAGE | | PAGE |
|------------------------------|------|---------------------------------|----------|
| Mark, chap. ii. ver. 4 - | 201 | John, chap. xix. ver. 9, 13 - | 200 |
| chap. xiii. ver. 14 - | 523 | Acts, chap. x. ver. 1, 7 - - | 107, 109 |
| chap. xvi. ver. 11, 13 | 200 | chap. 12, ver. 4, 6 - | 95 |
| Luke, chap. vii. ver. 2, 9 - | 109 | chap. xxi. ver. 31, 32 - | 107 |
| chap. xii. ver. 49 - | 285 | chap. xxiii. ver. 23 - | 108 |
| chap. xxi. ver. 20 - | 523 | Timothy, chap. iv. ver. 21. - | 4 |
| chap. xxii. ver. 55 - | 178 | 1 Peter, chap. iv. ver. 2, 3, 4 | 165 |
| John, chap. xviii. ver. 3 - | 278 | Revelations, chap. vi. ver. 5, | |
| chap. xviii. ver. 18 - | 178 | 6 - - - | 138 |
| chap. xviii. ver. 28, 23 | 200 | chap. xii, ver. 6 | 285 |
| chap. xix. ver. 13 - | 173 | chap. xxi. ver. 19 | 9 |

INDEX THE SECOND
OF SOME FEW
INCIDENTAL CIRCUMSTANCES,
NOT MENTIONED IN THE TABLE OF CONTENTS;
AND OF SOME
PECULIAR PASSAGES,
IN
ANTIEN'T CLASSIC AUTHORS,
REFERRED TO, OR ILLUSTRATED, IN THIS VOLUME.

| | PAGE | | PAGE |
|--|---------|---|------|
| A | | had no word properly to express the idea of one - | 223 |
| ABOMINATION of desolation,—the Roman Eagle - - - | 5,24 | Arch;—its first distinguished appearance in the natural world;—and its first introduction in architecture - - - - | 273 |
| —such Eagles probably, even identically stood at Richborough, and at Portchester, as afterwards stood at Jerusalem - - - - - | 5,23,24 | Arches;—few remains of such as were Roman, in Britain | 215 |
| Adrian;—the introducer of magnificent buildings in the provinces of the Roman empire | 176 | Arches;—none in the Temple of Solomon - - - - - | 223 |
| —his wall - - - - - | 275 | —very few, if any, even in Herod's Temple - - - | 225 |
| Agricola;—at Richborough | 3 | —none in the houses built by Solomon - - - - - | 228 |
| —his wall - - - - - | 275 | —none in the palace of Priam, as described by Homer | 229 |
| Antoninus;—the age of the Antonines, that of the greatest and most finished improvements in Roman architecture | 176 | —none mentioned by Homer - - - - - | 231 |
| —his wall - - - - - | 275 | —no arches, at Thebes, in Egypt - - - - - | 234 |
| Apollo;—a figure often found on tessellated pavements - | 191 | —none in the Pyramids | 235 |
| —apparent instance of a Triclinium, or dining room, taking its name from it - | 191 | —none in very old Hindoo buildings, in India - | 244 |
| Arch,—the Greeks originally | | —none in antient Babylon | 245 |
| | | —none at Persepolis - | 254 |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | PAGE | | PAGE |
|---|-------|--|---------|
| Arches;—none at Pæstum, before the time of Augustus | 262 | Babylon;—no arches in its Hanging Gardens - - | 249 |
| —none at Athens, before the time of Augustus - - | 263 | —characters discovered there, similar to those on the walls of Persepolis - - - | 249 |
| —none in the Temple of Diana, at Ephesus - - | 264 | —its houses, having three or four raftered coverings - - - - - | 243 |
| —none at Rome, much prior to the time of Augustus | 268 | Bag-pipe;—ascertained to have been a Roman instrument | 21 |
| Arches;—the first that are mentioned - - - - | 268 | Baths;—many Roman remains, commonly supposed to have been public baths, had no connection with any such public buildings - - - - - | 182,185 |
| —enumeration of most of the very antient ones at Rome | 270 | Bathing;—the manner in which it was commonly used by the Romans - - - - - | 214 |
| —none in the original wall of China - - - - | 273 | Bricks;—different kinds of Roman bricks - - - - | 8 |
| Archimedes, probably the inventor of the arch - - | 268 | Bricks, Roman;—the appearance of such not always a proof that walls are Roman - | 39 |
| Army.—Account of the manner of forming a Roman Consular army; and of the several orders of troops of which it consisted - - - - - | 76 | Bricks;—account of those of Babylon - - - - - | 249 |
| —order of the marching of a Roman army - - - | 59,60 | Britain;—had the earliest advantage of the Light of the Gospel - - - - - | 4 |
| —representation, and account of the marching of a part of a Roman army - | 277 | Britons;—some of the first converts; and also of the first reformers - - - - - | 4 |
| Athens;—its streets only ten feet wide - - - - - | 155 | —their improvements in arts, and science, under the Romans - - - - - | 283 |
| Atrium;—or court; sometimes a place of entertainment | 200 | —their horrible relapse into barbarity - - - | 284 |
| —derived to the Romans from the Greeks, and originally from the Persians - | 200 | Burgh Castle;—its great mount, subsequent to the Roman times - - - - - | 53 |
| Atrianses; whence so denominated - - - - - | 193 | —manner in which Roman troops seem to have been encamped within it - | 116 |
| Augurale, in camps - - | 5 | C | |
| B | | Cæsar, passages in his Commentaries, ascertaining the nature of the Decuman Gate - | 13 |
| Babylon;—no arches in its gates or walls - - - - - | 245 | | |
| —none in its bridges, or subterraneous passages - | 245 | | |
| —none in the temple of Belus, the old Tower of Babel | 248 | | |
| —inner part of the tower of Belus, quite one solid mass of brick work - - - | 248 | | |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | PAGE | | PAGE |
|--|---------|---|--------------------------------------|
| Camps;—temporary camps of the Romans described - | 73 | Castra, Roman;—sometimes themselves considered as Cities | 65 |
| — the manner in which smaller camps, for additional forces, were sometimes annexed to larger - - - | 74 | Century;—the nature of a division in a camp, so called - | 141 |
| — account of the precise manner in which the several orders of troops were placed, in a Roman camp - - | 74,93 | Chimneys;—not used by the Romans in their apartments | 177 |
| — arrangement of the individual tents, in each single maniple - - - - - | 95 | Christians;—saved, so that none of them perished, at the destruction of Jerusalem - - | 24 |
| — employments of soldiers, in their camps - - - | 96 | Christian Churches;—often built upon, or near the very spots, where stood the Sacella of Roman Castra | 20,27 32,49 51,151 |
| — manner of marking out a camp - - - - - | 97 | Cicero's, account of his villas | 195,197 |
| Camp;—mode of forming a double Consular camp - | 100 | — his account of his entertaining Julius Cæsar, at his villa | 198 |
| — small post in a great camp, for the communication of signals - - - - - | 137 | — his curious account of the blunders of Diphilus | 196,201 |
| — Hyginian camp - - - | 141 | — his account of an arch built by Verres, at Syracuse; one of the very first mentioned | 268 |
| — the Roman manner of placing forage, and stores, in their camps - - - | 87,280 | A Cohort;—its numbers, and how formed - - - - - | 77,107 |
| — camp of the Israelites, compared with that of the Romans - - - - - | 98 | Columns;—strange disproportions of the most antient ones, at Pæstum, and at Athens | 263 |
| Capitals;—antient ones, like compressed bags - - - | 263 | A Consular camp, adjusted in every part, and in perfect consistency with every minute circumstance as described by Polybius - - - - - | 93 |
| Carpenters, and builders;—numbers of them regularly attending a Roman army | 58,60 | A Consular army;—its number | 84 |
| Causaubon;—a correction of an inadvertent translation of his, of the words of Polybius; which removes many difficulties in the accounts of Roman camps - - - | 82 | Courses of Brick;—regularly placed alternately,— <i>Θεμελίαι</i> | 39,161 |
| Castell;—seems to have been led into an error, in his ideas of Roman villas - - - - | 203,211 | Crassus;—the introducer of the Atrium; and of a more improved style of building in Rome - - - - - | 201 |
| Castra, Roman;—why sometimes deviating from the usual square form - - - - | 37 | Crypto-porticus;—its general use; and the slight manner in which it was generally constructed - - - - - | 174,176 178,189 196,201 204 |
| | | Cube;—the cube, and double cube, in architecture; first found to have been introduced in the Tabernacle, and Temple | 223 |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | PAGE | | PAGE |
|---|-----------------|--|----------|
| D | | F | |
| Decuman;—always implied an idea of vastness - - - | 9,12 | Fire-places;—none in Roman villas—pans of hot embers, and stoves, alone used - | 205 |
| Decuman gate;—always placed on the safest, and least dangerous side - - - - - | 55 | Foot of the Romans;—compared with English measure | 121 |
| Decuman gate;—full account of it;—and an error with regard to its situation endeavoured to be fully rectified | 12,14 71,143 | Forage, and stores;—manner of placing them in a camp - | 87,280 |
| — fine remains of one at Pevensey - - - | 38 | Foundations;—explanation of the words <i>Θεμέλιοι</i> and <i>Θεμέλια</i> - - - - - | 9 |
| — peculiar construction of the pavement under the passage through a Decuman gate - - - | 12 | G | |
| Diodorus;—his account of Babylon, and of its bridge, and of its hanging gardens, examined - - - - - | 245,250 | Gates of a Roman camp;—explanation of their different kinds - - - - - | 5 |
| E | | — mistakes that have been made with regard to the distinguishing of them, endeavoured to be rectified - | 12 |
| Eagles, of the Romans;—were actually idols;—and worshipped as such - - - | 24 | — Decuman gates - - - | 14,50,54 |
| Eagles, Roman;—some of those which were actually advanced against the walls of Jerusalem, were probably once in the fortresses of this Island - | 23 | — Principal gates - - - | 10,50 |
| Eagle, of steel, dug up at Silchester - - - - - | 157 | — Prætorian gates - - - | 36,50 |
| Eagle, on Roman Standards, often adorned with the bulla aurea - - - - - | 278 | Grossness of antient manners, amongst the Romans;—and in the world at large - | 16½ |
| Earth-works of Romans,—both stations, or castra; and camps | 66 | H | |
| — in these, the defect of not having high walls, sometimes supplied by the increased number of ramparts, and ditches - - - - - | 71 | Herodotus;—his account of the Labyrinth in Egypt, examined, and considered - - - | 239 |
| Engines, of the Romans, that threw stones of 113 pounds weight - - - - - | 62 | — his account of the houses at Sardis - - - | 242 |
| Exhedria;—apartments to be distinguished from Exhedra | 197 | — his account of Babylon examined - - - | 245 |
| | | — his account of the triple or fourfold roofs considered, as not really meaning different stories of rooms | 242 |
| | | Herring-bone work of the Saxons | 9,42,43 |
| | | Houses of Sardis, and Nineveh, compared with those of India | 242 |
| | | — of the common inhabitants of antient cities, easily removeable - - - - - | 242 |
| | | — having three or four raftered coverings, does not at | |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | PAGE | | PAGE |
|--|-------|--|----------|
| all necessarily imply their having so many different stories - - - - - | 243 | precise manner, in which troops seem to have been placed in that camp; exactly agreeing with the situation of its remaining gates - | 94 |
| Hyginian mode of encamping explained - - - - - | 141 | L | |
| Hypocausts;—their nature, and mode of construction explained - - - - - | 183 | Labyrinth fret;—the most ancient ornament in the world | 190 |
| — not brought into general use, till the time of Nero | 184 | A Legion;—its numbers - | 76,147 |
| I | | Livy;—passages in his history, elucidating the real situation of the Decuman gate - - | 12,14,15 |
| Idolatry;—has been introduced in various shapes, at different periods - - - - - | 285 | — passages in his history, illustrating the manner in which smaller camps, for additional troops, were sometimes annexed to larger - | 74 |
| Imperial army;—its numbers | 142 | — his account of arches built by Scipio;—which seem to have been the first that are mentioned - - - - - | 268 |
| Indian architecture;—its connection with the Egyptian | 243 | Lucullus,—his magnificence:—and his Apollo apartment, explanatory of some in Britain | 191 |
| Josephus;—his account of the Romans offering sacrifices to their Eagles - - - - - | 24 | M | |
| — his very interesting account of Roman camps;—himself an eye witness - | 58 | Military, new inventions, and improvements, a principal, and immediate cause of the founding of some of the great empires - - - - - | 97 |
| — his interesting account of the Roman order of marching, and of setting out | 59,60 | Mosaic pavements;—their good preservation; and yet perishable nature - - - - - | 167 |
| — his account of towers built on the ramparts of Roman camps - - - - - | 57 | Mount of Olives—the spot on which the tent of Titus was placed, before Jerusalem - | 25 |
| — his account of the great numbers of carpenters, and builders, attending a Roman army - - - - - | 58 | N | |
| — his singular account of a Centurion slipping on the marble pavement of the Temple - - - - - | 79 | Nails worn in their boots by Roman soldiers - - - - | 79 |
| — his accounts shew that there were no arches in the cloysters of the temple | 225 | Norman additions to fortresses, that have been first Roman, and then Saxon - - - | 33 |
| Irregularity,—in building, in ancient times - - - - - | 7 | O | |
| Irregularity sometimes in marking out Roman camps - | 76 | Orpheus;—reasons for believing his supposed figure, described as found on some tessellated | |
| K | | | |
| Kirkbodo;—an account of the | | | |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | PAGE | | PAGE |
|---|---------|---|--------|
| pavements, to have been rather designed for that of Apollo - - - - - | 190 | Pliny;—his odd account of dishes, floating on a great marble basin of water, at an entertainment - - - - - | 212 |
| P | | | |
| Paestum;—no arches there, before the time of Augustus | 262 | — his regular cut box hedges, in his gardens - | 212 |
| Palladium of Rome,—compared with the shrine of Diana - | 267 | Pliny's account of the building of the Temple of Diana, at Ephesus - - - - - | 264 |
| St. Paul,—probably once at Richborough - - - - - | 3,25 | Polybius,—his account of the encampments of the Romans | 76 |
| Persepolis;—by whom first described, in modern times - | 255 | — a correction of the translation of a passage in his account of Roman camps, which seems to remove many difficulties, and embarrassments, in the explanation of them - - - - - | 82,100 |
| — like those of Egypt - | 255 | Pompeii,—its narrow streets | 129 |
| — characters upon its walls,—similar to those on bricks lately found at Babylon | 249 | — its square small courts, or Atria - - - - - | 202 |
| — full illustration of Persian armour, and dresses in the bass-reliefs on its walls | 257 | Portchester;—a Roman Castrum;—its original state;—its Roman towers, &c. - | 26 |
| — built by Egyptian artists - - - - - | 261 | — additions to it in Saxon times - - - - - | 28 |
| Persepolis;—the representations on the rock at Naxi Rustan elucidated - - - - - | 261 | — additions to it in Norman times - - - - - | 32 |
| Pevensey;—a Roman fortress;—its irregular area - - - - | 37 | — manner in which Roman troops seem to have been encamped in it - - | 119 |
| — its Roman towers - | 41,43 | Porticus;—often confounded, by Roman writers, with the Crypto-porticus - - - - | 206 |
| — additions to it, in Saxon times - - - - - | 44 | Prætorian gate,—placed in general, both nearest to the enemy, or side to be best guarded;—and nearest to the Prætorium - - - - - | 15,155 |
| — additions to it, in Norman times - - - - - | 45 | Prætorian gates - - - - - | 32,42 |
| — not built by William the Conqueror - - - - - | 47 | Prætorium;—the form, and dimensions of that at Richborough, and of its Sacellum, ascertained - - - - - | 19 |
| Pharos Tower, at Dover,—the peculiar mode of its construction - - - - - | 159 | Prætorium;—the account given of its dimensions, in a Con- | |
| Pipes, for the conveyance of sound, in the towers, and walls, of Byzantium - - | 37 | | |
| Plaster;—colours laid upon it when wet,—extremely durable - - - - - | 203 | | |
| Pliny's account of his villas | 204,211 | | |
| — account, of his manner of employing his time - | 214 | | |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | PAGE | | PAGE |
|---|--------------|--|-------------------------------|
| sular camp, mistranslated, and mistaken, by Casaubon, and others - - - - | 81 | probably in our British fortresses, which actually stood afterwards before the walls of Jerusalem - - - - | 25 |
| The correction of this error reduces the whole account of a Consular Camp to perfect consistency - - - - | 91 | Roman feet;—compared with English - - - - | 121 |
| And also accounts for the exact dimensions of the smaller prætoria, in smaller camps | 115,128 | Roman manners;—in some instances very gross - - | 164 |
| Principal gate;—the peculiar construction of one - - | 10 | Roman houses;—often built merely of wood - - - | 60 |
| Providence Divine;—an attention to it, the only true key to the right apprehension of history - - - - | 287 | Roman magnificence;—too highly appreciated - - - | 170,175 182,194 203,281 |
| Pyramids of Egypt;—description of them - - - - | 236 | Roman buildings;—not many of any great magnificence in Britain - - - - | 215,221 |
| Pyramids;—the analogy between some of them, and Indian pagodas - - - - | 244 | Roy, General,—apprehended to have been led into an error, with regard to the Decuman gate - - - - | 13,143 |
| Q | | — remarks on the dimensions he assigns to a Consular prætorium - | 81,91 |
| Quintus Curtius;—his account of the hanging gardens at Babylon, considered - - | 252 | — remarks on his account of the double maniples of allied horse, and foot, in a Roman Consular camp - - | 86 |
| R | | — his difficulty, as to the filling up of a Roman camp exactly, remedied - - | 91,92 |
| Ramparts;—sometimes numerous, to supply the want of high walls - - - - | 71,128 | — some little differences in other respects from his conclusions - - - | 95 |
| Regularity;—minute regularity, not always observed in the outlines of Roman camps, and castra - - | 71,76 105 | S | |
| Richborough;—originally built in the reign of Claudius; and towers added to its walls, in that of Severus - - - | 17 | Sacellum;—the form of the Sacellum of the Roman Prætorium at Richborough, explained - - | 19 |
| — manner in which Roman troops seem to have been encamped in it - - | 111 | — that of a Roman Castrum, often either converted into a Christian Church;— or else had a Christian Church built near the spot | 20,27,32 49,51 151 |
| Rooms;—their small proportions in general, in Roman houses | 202 | Sardis;—the mode of construction of its private houses - | 242 |
| Roman baths;—Remains so called, oftentimes did not properly belong to such - - | 182 | Saxon innovations;—manifest in Roman Castra - - - | 28 |

INDEX. INCIDENTAL CIRCUMSTANCES.

| | PAGE | | PAGE |
|------------------------------------|---------|-----------------------------------|----------|
| Saxon residence, in Keep towers | 31 | Towers;—vestiges of Roman | |
| Saxon roofs, of old towers;— | | towers at Richborough - | 17 |
| placed depressed far below | | —— Roman Towers, at Port- | |
| the battlements - - - | 30 | chester - - - - - | 26 |
| Severus, his wall;—how con- | | —— Saxon Towers at Portches- | |
| structed - - - - - | 7,275 | ter;—built there subsequent- | |
| Severus;—towers added by him | | ly;—and very different both | |
| to the walls at Richborough | 17 | from the Roman, and from | |
| Shrine, of Diana;—a case—in- | | the Norman towers;—and | |
| closing the idolatrous ob- | | this distinction pointed out | 23,30 |
| ject - - - - - | 266 | Towers Roman;—the lower | |
| Smallness of apartments in ge- | | parts, oftentimes constructed | |
| neral, in Roman houses - } | 175,186 | as one entirely solid mass - | 38,42,53 |
| Staircases, in the temple of So- | 202 | —— the courses of | |
| lomon - - - - - | 229 | bricks in them, do not always | |
| Stones, falling from the clouds | 267 | correspond with those in the | |
| Strabo;—his account of the | | adjoining walls - - - | 17,54 |
| hanging gardens at Babylon | | —— of wood, often con- | |
| considered - - - - - | 251 | structed on the ramparts of | |
| Strigæ;—in an Hyginian camp | 142 | Roman Castra - - - | 57 |
| T | | Towers, considered as very extra- | |
| Tacitus;—his account of the | | ordinary parts of a Roman villa | |
| temple at Camalodunum, | | Solid Towers of brick work;— | 204 |
| shews that it could not have | | formed the interior parts of | |
| been a large structure - - | 220 | some antient buildings - | 248 |
| Temple of Solomon;—its fine | | V | |
| proportions - - - - - | 224 | Velites;—not encamped sepa- | |
| Temple of the Tartars, built | | rately, in maniples, or bands, | |
| solid in the interior part, and | | by themselves, in Roman | |
| compared in this respect with | | camp;—but parcelled out, | |
| that formerly at Babylon - | 249 | and divided amongst the other | |
| Tessellated pavements;—con- | | more regular bands of Le- | |
| clusions drawn from such con- | | gionaries - - - - - | 77,86 |
| siderable parts of them having | | Versailles;—the idea of its gar- | |
| been preserved, when the su- | | dens perhaps in part taken | |
| perstructures have perished | 167 | from Pliny's description of | |
| —— the dif- | | his Tuscum - - - - - | 212 |
| ferent kinds of tesserae, or dies, | | Vespasian;—probably at Rich- | |
| used in them;—and the modes | | borough, and at Portchester | 3,23 |
| of constructing them - - | 171 | —— his distinguished com- | |
| Testudo;—mistakes, as to the | | mand, and great actions in | |
| true meaning of this word | 196 | Britain - - - - - | 23 |
| Thebes, in Egypt;—no arches | | —— the curious order of | |
| in its gates or temples - | 234 | his mode of marching - - | 60 |
| Titus, afterwards Emperour;— | | Villa;—Cicero's curious account | |
| must have been at Portchester | 25 | of his alterations in one - | 195 |

INDEX. INCIDENTAL CIRCUMSTANCES

| | PAGE | | PAGE |
|--|----------------|--|-------------------|
| Villas :—description of Roman villas - - - - - | 185 | Walls of the Romans;—explanation of what is meant by their foundations, or <i>Θεμελίους</i> | 9,10,39 49,276 |
| — Roman villas, in general only one story high - - | 194 | — parallel lines of small square holes in some Roman walls - - - | 10,65 |
| — the great number of them possessed by individual Romans, shews how slight the buildings must have been - | 194 | Walls;—the want of high ones, in castra, and camps, sometimes supplied by numerous ramparts, (or Valla), and ditches, one beyond another | 128 |
| — the smallness of their apartments in general - - | 204 | Walls of the Romans, built to prevent the Pictish irruptions | 275 |
| — odd, remote, straggling situation of their principal apartments - - - - | 206 | Water;—streams of water sometimes made to pass through Roman Camps - - - | 56,64 |
| — few stoves, and no fire-places in their apartments, except in pans, in the middle of the room - - - - | 206 | Weapons of the Romans;—their peculiar form - - - - | 78 |
| — the paintings on their walls very rude - - - | 213 | Well;—danger from one in Portchester Castle - - | 34 |
| W | | Wine;—anciently preserved by being covered with oil - | 200 |
| Walls of the Romans;—mode of constructing them | 7,53,55 277 | | |

DIRECTIONS TO THE BOOKBINDER

FOR PLACING THE PLATES.

ALL the 37 Plates, (except the Frontispiece, and the folding Plate, and such as are obviously to be placed upright,) are to be bound with the tops inward; (or next the binding):—but the Frontispiece is to be placed with the top upwards; and with the bottom, and Inscription inwards, next to the binding.

| Plate | The Frontispiece.—A Roman General giving directions, from the Prætorium. See the Explanation, p. 279. | } to face the Title-page. | To face page |
|-----------------|--|---------------------------|--------------|
| XVI. | Plan of the great Roman Castrum, at Richborough, in Kent | - | 6 |
| XVII. | External appearance of the walls of Richborough | - - | 10 |
| XVIII. | Fig. 1, and 2. Plan, and elevation, of the Postern;—in the north-east wall, at Richborough; which was one of the PRINCIPAL Gates | | |
| | Fig. 3. Plans of the north and west round Towers, at Richborough | - | 16 |
| XIX. | Fig. 1. Platform of stones;—at the west entrance, of GREAT DECUMAN GATE, of Richborough | | |
| | Fig. 2. Representation of the junction of a tower, with the south-west wall, at Richborough | | |
| | Fig. 3. Representation of the junction of the tower of the north-eastern wall, at Richborough | - - - - | 18 |
| XX. | Fig. 1. Plan of the Sacellum, belonging to the Prætorium, at Richborough | | |
| | Fig. 2. Section of the foundations of the Sacellum, and of the great platform of the Augurale | | |
| | Fig. 3. Bronze figure of a Roman bagpiper, dug up at Richborough | - | 22 |
| XXI. | Plan of the Roman enclosure, of Portchester Castle | - - | 26 |
| $\frac{XXI}{2}$ | Plan of Portchester Castle, with the Norman additions | - | 28 |
| $\frac{XXI}{3}$ | Plan of the inner court of Portchester Castle; with its Saxon tower; and Norman works | - - - - | 30 |
| $\frac{XXI}{4}$ | Plans of different parts, both Saxon, and Norman, of the Castle at Portchester.—And Elevations of the inside of the end walls of Portchester Keep Tower, and of that at Castleton, in Derbyshire | | 32 |
| $\frac{XXI}{5}$ | View of the Saxon Keep;—and of the Norman inner court, at Portchester | - - - - | 34 |
| $\frac{XXI}{6}$ | West front of the Saxon Church, in Portchester Castle | - | 36 |
| XXII. | Great Decuman Gate; of the original antient Castrum at Pevensay, in Sussex | - - - - | 38 |
| XXIII. | Plan of Pevensay Castle | - - - - | 40 |

DIRECTIONS TO THE BOOKBINDER.

| Plate | To face |
|--|---------|
| <u>XXIII</u> 3 | page |
| Bird's-eye view of Pevensey Castle - - - - | 42 |
| XXIV. Inside view of that which was the Prætorian Gate, at Pevensey - | 44 |
| XXV. Outside view of that which was the Prætorian Gate, at Pevensey | 44 |
| XXVI. External appearance of the walls and towers of Pevensey;—from (b) to (e) in the plan - - - - | 44 |
| XXVII. Fragment of the wall of the Saxon Keep, that was added to the Roman Castrum, at Pevensey - - - - | 44 |
| <u>XXVII</u> 2 | 46 |
| Norman wall, of Pevensey, seen on the outside;—from (g) to (h) in plan | 46 |
| <u>XXVII</u> 3 | 46 |
| Norman wall of Pevensey, seen on the inside of the court;—from near (g) to (h) - - - - | 46 |
| <u>XXVII</u> 4 | 46 |
| Norman wall of Pevensey seen on the outside of the court, from (l) to (g) | 46 |
| <u>XXVII</u> 5 | 48 |
| Inside view of the tower (m), at Pevensey - - - - | 48 |
| <u>XXVII</u> 6 | 48 |
| Inside view of the Sally Port, in the tower (h), at Pevensey - | 48 |
| XXVIII. Comparative view of Roman Castra - - - - | 70 |
| <u>XXVIII</u> 2 | 72 |
| Arrangement of Maniples, at the Roman Stations, of Castor,— Birrens,—and Sodbury - - - - | 72 |
| <u>XXVIII</u> 3 | 74 |
| Mode of encamping Roman troops, at Kirkboddo - - - - | 74 |
| <u>XXVIII</u> 4 | 94 |
| Plans of Roman Castrametation - - - - | 94 |
| <u>XXVIII</u> 5 | 100 |
| Further Plans of Roman Castrametation;—and a Plan of the Camp of Israel - - - - | 100 |
| <u>XXVIII</u> 6 | 140 |
| Comparative dimensions, of Roman Stations - - - - | 140 |
| <u>XXVIII</u> 7 | 146 |
| Hyginian mode of encamping, &c. - - - - | 146 |
| <u>XXVIII</u> 8 | 182 |
| Plans, of remains of Roman buildings, in Britain - - - - | 182 |
| <u>XXVIII</u> 9 | 194 |
| Plan of Roman Villa, at Woodchester - - - - | 194 |
| <u>XXVIII</u> 10 | 210 |
| Pliny's Laurentine Villa - - - - | 210 |
| <u>XXVIII</u> 11 | 278 |
| Part of Roman Army, passing a bridge of boats - - - - | 278 |
| <u>XXVIII</u> 12 | 280 |
| Roman mode of placing their military stores, and forage - | 280 |
| <u>XXVIII</u> 13 | 282 |
| Roman mode of placing stores, and forage, in the space by the ramparts - - - - | 282 |

ERRATA IN VOLUME I.

| Page | Line | |
|------|------|--|
| 7 | ult. | instead of <i>Wesselingei</i> , read <i>Wesselingii</i> . |
| 27 | 3, | from the bottom, after the words there cited, <i>transverse diameter</i> , add (<i>or lesser axis</i> .) |
| 51 | 4, | instead of <i>or</i> , read <i>nor</i> . |
| 135 | 7, | instead of <i>much most</i> , read <i>much more</i> . |
| 156 | 5, | instead of <i>call</i> , read <i>called</i> . |
| 157 | 5, | after the words <i>transverse diameter</i> , add (<i>or lesser axis</i> .) |
| 165 | 31, | after 13, and also after 9, instead of <i>feet</i> , read <i>inches</i> . |
| 184 | 3, | from the bottom, instead of <i>ἀρι</i> , read <i>ἀριῶ</i> . |
| 193 | 3, | from the bottom, after the words, <i>as it stood in Jersey</i> ,—add, by way of further explanation, — <i>or</i> (<i>if we allow also for the gradual shifting, and receding of the equinoctial points, and the precession of the equinoxes,</i>) <i>at least fronted what was, at the time of the first rearing of the structure, deemed then, in correspondence with the rising of some certain fixed star, to be the east.</i> |
| 253 | 22, | after the word <i>saws</i> , add <i>of</i> . |
| — | — | in the last leaf of all, in the twentieth line, instead of the word <i>Appendix</i> , read <i>Supplement</i> . |

ERRATA IN VOLUME II.

| Page | Line | |
|------|------|--|
| 6 | 3, | from the bottom, for 560, read 460. |
| 132 | 3, | from the bottom, for 156, read 150. |
| 134 | 14, | after 269, add $\frac{1}{2}$. |
| 134 | 3, | from the bottom, after Pl. $\frac{XXVIII}{6}$, add <i>Fig. 3</i> . |
| 177 | 2, | after the words <i>principal apartment</i> , add (<i>a</i>). |
| 206 | 12, | after the words <i>further end</i> , add <i>a Cavadium</i> . |
| 278 | 6, | from the bottom, to the words, <i>St. John's Gospel</i> , add <i>Chap. xviii. ver. 3</i> . |

